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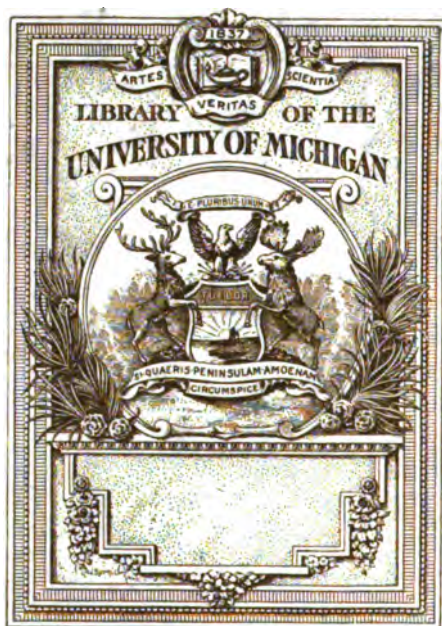
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THE OPERATION OF THE NEW BANK ACT



THE OPERATION OF THE NEW BANK ACT

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PREFACE

To issue a book which endeavors to analyze the effects of a monumental piece of legislation, marking a distinct change of policy in one of the most important lines of business in the country within a few weeks of its passage, is unusual. The writers would naturally prefer, under ordinary circumstances, to delay publication until the experience of several years had demonstrated the law's advantages and defects. If this volume were intended as a complete estimate of the effects of the Federal Reserve Act, such a course would be necessary. The purpose, however, is to give whatever assistance may be within the authors' power to the formulation of public opinion through the dissemination of such information as is now available. The period of organization is a critical stage in the life of the law. Its success or failure will depend primarily upon the degree to which bankers and the public at large give intelligent coöperation in the inauguration and operation of the new system. The Federal Reserve Act marks such a pronounced departure in American banking methods that every bit of light shed upon the new conditions will be helpful. If this book aids the banker to understand more clearly the change which has been effected in his business and informs the public at large concerning the nature of this Act, the authors will be well satisfied.

The authors desire to express their indebtedness to their associate, Mr. Gordon B. Anderson, for valuable assistance rendered in the calculations concerning the shifting of reserves. Valuable help has also been received from Miss Marion Conway and Mr. Earle H. Raudnitz, in verification and proofreading.

T. C., JR.
E. M. P.

PHILADELPHIA, January 14, 1914.

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THE OPERATION OF THE NEW BANK ACT

CHAPTER I

THE DEFECTS OF THE PRESENT BANKING SYSTEM

The National Bank Act.—For fifty years the United States has lived rather happily under the National Bank Act, born in the strife of the Civil War and developed in the period of the nation's greatest expansion and growth. This Act has, by its record, earned for itself a place as a great piece of constructive legislation; and the recognition of this fact is responsible for the preservation of our national banking system almost intact under the Federal Reserve Act. The National Bank Act removed the ills of wildeat banking, which so afflicted the country prior to the Civil War; gave us an absolutely safe form of money which, although not legal tender, is taken without question by everyone; and has made possible an enormous expansion in the banking resources and facilities of the country. In spite of the denunciation and abuse which have been heaped upon it, the Act has been reasonably satisfactory in operation. Any one who reviews the figures of the material growth and prosperity of the nation and the rise of its financial power will be forced to the conclusion that no Act that was fundamentally unsound could have been an integral part in the achievement of such a notable record.

United States Banking Democratic.—Designed for the purpose of encouraging a system of independent banks, the Act has been responsible, directly and indirectly, for the creation of some twenty-five thousand banking institutions in this country, practically all of which are independent of each other. Instead of a small banking class and an equally

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small group of banks, all under the domination of one or a very few interests, we have developed a system of banking which has sprung from the people, and which is closer to the people than that of any other country. Any group of men having a comparatively small amount of capital which they desire to use in the establishment of a bank, possessing good reputations and having earned for themselves the confidence of the community, can successfully organize a banking institution. Banking is not a monopoly in the United States, and one of the strongest features of our banking system is the fact that those who sit upon the boards of directors of our financial institutions, who pass upon loans and manage their affairs, are business men upon whose judgment, foresight and conservatism depends the future of the republic.

The State Banks.—Side by side with the national banking system have grown the State banking systems of our forty-eight commonwealths, modelled in the main upon that established by the Federal government. The increase in these State institutions has been very rapid, and they now outnumber the national banks about three to one. This growth has been particularly great since 1900, the number having more than doubled since that time. This surpasses by far the remarkable record of the national institutions, and has been one of the most striking changes in American banking conditions in this generation.

The great popularity of State charters is the result in part of the greater latitude and broader opportunities for making money generally conferred by them as contrasted with those granted under the national law. To some, the less strict requirements and examinations under State control are inviting. This situation is one of the problems which must be dealt with in the operation of the new bank act and the management of the new system. The national government is handicapped in creating an ideal banking system by the fact that the majority of the banks of the country are outside of its jurisdiction. The power of the States to charter banks forces the Federal government to adopt a conciliatory attitude in its effort to effect banking

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reform. This may not be an unmixed blessing, for it counsels moderation and the avoidance of any harsh or radical change.

National Banks the Stronger.—Although the national banks comprise only about one-third of the total number, they possess almost one-half of the aggregate resources of all the banks of the country, and because of the plan of organization of the national and State banking systems, they occupy a position of supremacy. The Federal Reserve Act is planned upon the theory that the weaknesses in the national banking system can be remedied, and the defects in the American banking system can be almost entirely eliminated, without making any radical changes in the laws governing the State banking institutions.

For more than a decade there has been persistent agitation for the reformation of the national banking system. Although the progress of this country has been rapid and our banks have, on the whole, been able to cope with the problems presented to them, yet it has been apparent for many years that the whole system was defective. While business has not been throttled it has been cramped, and it is difficult to tell how much more prosperous we would have been as a nation had these defects not existed. To a large degree the existence of these imperfections is something concerning which the business man has been unconscious, except in times of panic. When the West and the South, for the purpose of moving the crops, withdraw money which they have deposited in the eastern banks, we have a season of very high interest rates. This situation is unknown in any other well-developed country of the world. The payment of these high interest rates, the scarcity of money which they betoken and the uncertainty which the withdrawals from the eastern banks create, are a check upon business enterprises.

Our Frequent Panics.—During perhaps ninety-nine months out of every one hundred, the banks are able to meet promptly their obligations to their customers. Checks can be cashed without delay, money transferred by draft

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or in any other manner the customer may elect, collections made with expedition, loans secured where a good bank risk is presented, the sale of securities financed and all the other work of a bank successfully conducted. In the hundredth month, however—frequently without adequate warning—a financial panic may suddenly spring up, beginning with some comparatively insignificant event in a far distant part of the country. The blight spreads with lightning rapidity and almost over night the exchanges of the country are paralyzed, business men are denied credit upon which they have been counting and which they badly need, loans are refused and financial chaos and disorder are rampant. It takes the country years to recover from the effects. No great nation of the world has been afflicted with so many panics within the last half century as the United States. Business has struggled through the panics of 1873, 1884, 1890, 1893, 1901 and the great crisis of 1907. When we consider the havoc and ruin brought by these financial convulsions we marvel at the great recuperative power of our country.

Panics are psychological phenomena. They are akin to a stampede in a theatre at the cry of fire, as both are due to a latent conviction, which suddenly becomes active, that the disturbance will mean disaster to all within its scope. The conditions which breed a panic are slow in the making, and may consist of either commercial or financial excesses. Commercial crises can not entirely be prevented by any system of banking legislation; for they have occurred in every country of the world, and will no doubt occur in this country and elsewhere in the future. Financial panics, however, can to a large degree be prevented, or at any rate their effects can be greatly minimized. Of the six panics which have afflicted this country in the last half century, the great majority have been financial convulsions, which did not spring from any inherent unsoundness in business, but were the results of defects in our banking system and the unwise policies which had been pursued as a result of them.

The panic of 1907 really laid the basis for the Federal

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Reserve Act of 1913. This great convulsion, from which the country has not yet fully recovered, was not the fault of business men, but was the result of unwise management of banking affairs. It was almost entirely a bankers' panic, and to a large degree the price has been paid, in the intervening months, not by the bankers but by business men and every one of their employees down to the humblest workman. Every individual in this country has an interest in any plan of banking reform that will to a large degree eliminate the financial disturbances that bring business disorganization and dull times.

What are the most serious defects in the banking system of this country? It is inexpedient at this time even to catalogue all of the defects which exist. Many of them are of minor importance to the business man and to most bankers. It is generally agreed among bankers that if a few serious and inherent defects could be remedied, the balance would either rectify themselves or could be adjusted by the bankers without any difficulty. Because there are so few congenital defects it is wise, as Congress has done, to preserve the old system, modifying it as little as possible.

Our Decentralized Reserves.—The most serious defect is in the cash reserves which are kept by our banks against their deposits. Every bank in the world must keep a certain amount of cash on hand, in order to meet the demands of its depositors and inspire the confidence of its customers. The amount which a bank should have must bear some proportion to the deposits which it has received. It should be fixed with regard to the character of the deposits, that is, with reference to the type of people who are depositors, and the purpose which these people had in mind in making the deposits. A bank whose depositors are made up of foreigners who can not read English or who do not understand the customs of the country, would need a larger reserve than an institution dealing with less excitable people, whose suspicions would not be so readily aroused and who would not be so likely to make a sudden demand for their money. A bank holding the savings deposits of an industrial com-

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munity, representing the sums laid aside by workmen and mechanics as a provision for old age, does not require as large reserves as another institution, whose accounts consist largely of balances intended for the payment of the ordinary debts of its customers. There is no golden rule as to what reserve a bank should keep. The law in America specifies for every class of institution, except private banks, a certain minimum amount which each must have on hand; but the law, if wisely drawn, simply reflects the result of experience and the sentiment of the community.

Unlike the conditions in Europe or in Canada, we have in this country an extreme decentralization of reserves, the twenty-five thousand independent banks each keeping a part of its reserve in its own vaults. There has been little concentration of money in any one great reservoir or chain of reservoirs with which to meet the needs of the business institutions or the banks of a community in time of stress. The great central banks of Europe are primarily bankers' banks. They are institutions to which the other banks when hard pressed can turn for loans, secured through the sale or rediscount of the commercial paper which these banks have purchased. A bank in the United States has no such haven of refuge. So long as its cash reserve holds out it can meet the demands of its depositors, but when this is gone the only recourse is to appeal for help to the other banks of the community. These neighbors may feel that to extend help is dangerous, since by giving it they might weaken themselves, and the trouble would thus be spread. Yet if help is denied, the bank under attack almost inevitably fails, and the crash so alarms the community as to extend the panic to other institutions and create a most acute situation.

Aid in Distress.—To the credit of the American bankers, it may be said that they have been (as a general rule) ready to come to the aid of their distressed associates, not only through patriotic motives but because self-interest has prompted it. In some cases aid is extended by an unusually strong bank which puts its credit behind the weaker institu-

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tion, restores confidence, and stops the run. In other cases the banks, through a cooperative organization known as a clearing house, originally designed for the purpose of exchanging checks between banks which are its members, accomplishes the desired end. The assistance given is through loans made by the clearing house, the member banks contributing to the organization such amounts as they feel they can spare, or as they may be called upon by the clearing house association to furnish. These devices are, at the best, only makeshifts. Fear can not be quelled as long as there is any possibility that aid will not be forthcoming promptly, and to an extent sufficient to prevent disaster. The bitter experience of six panics has ingrained in the American people a more or less unconscious distrust of the emergency measures which banks can take, and no matter how willing may be the financial institutions to aid each other, this popular suspicion practically nullifies in advance every effort.

Deposit Reserves.—It should not be inferred that all of the twenty-five thousand banks in this country carry their reserves in their own vaults. Such a system of decentralization does not exist in any civilized country. To a certain degree there is centralization. A large proportion of the State banks carry a part of their reserves on deposit with other State banks or with national banks. The national banks are divided into three classes, the banks in all but one of which are allowed to carry a portion of their reserve on deposit with banks in the other classes. Thus a peculiar situation is developed. A large share of the resources of the big banks of our large cities represents the funds deposited by smaller banking institutions scattered over a wide area. These funds are a part of the cash reserve of the scattered banks. This situation exists to a peculiar extent in New York City and in Chicago. At the time of the panic of 1907 over \$465,000,000 of the \$1,000,000,000 of the deposits of the national banks of New York City were the reserves of other banks of the country, which had been deposited with them. The panic of 1907 began as a small local disturbance in New

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York City. For various reasons it was not suppressed in time and gradually involved other institutions in the metropolis. Before any one realized it, a lurid exposure of the malodorous practices of a certain group of financiers who controlled some of the New York institutions filled the news columns of practically every paper in the United States. Bankers and the public at large began to be distrustful of the whole New York banking fabric. The banks, anticipating trouble, started to call home a part of their reserves, and a national panic was on.

New York Reserves Small.—A great defect of our system became at once glaringly apparent. The big banks of New York have never carried a large surplus reserve to meet such demands from out-of-town banks, and when the demands were made a suspension of the New York banks was inevitable. The same thing had occurred over and over again under similar circumstances. The New York institutions were not able to pay back any considerable percentage of their \$465,000,000 of bankers' deposits. To handle the demand of their own local customers it became necessary for them to suspend cash payments entirely, by refusing to cash checks over the counter; and to prevent withdrawals through the clearing house by the device of the clearing house loan certificate. These devices were extra-legal, but enabled the New York banks to evade paying many of their creditors. The clearing house loan certificate is a receipt acknowledging the deposit with the clearing house association of approved collateral to an amount sufficient to warrant the issue of the certificate. The certificate must be accepted at its face by any bank in the clearing house in settlement of balances due.

When the New York banks issue clearing house loan certificates, suspension of cash payments throughout the country immediately follows. Every banker realizes that if the New York banks can not pay each other, they can not pay him; and the banks in every state from Florida to Oregon and from Maine to California immediately follow suit by hoarding cash. In a flash the ordinary methods of pay-

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ment are destroyed, and business, when done at all, must be entirely upon the basis of future payments.

This is the story of the panic of 1907 and it is typical of what has occurred in every other great panic in the last half century. There were no conditions which would cause a panic in Minnesota, in the Middle West, in the South, in New England, or in any part of the country except New York City. The failure of the New York banks to meet their obligations while they were holding a large part of the reserves of the country banks, had the same effect upon the circulation of money as the failure of the heart beat upon the circulation of the blood. Any reform in our system of banking which will not so alter conditions as to prevent such a disturbance will fail of its purpose.

Weaknesses in This Practice.—If centralization of bank reserves is the universal rule in European countries, where panics are less frequent, why is it that the centralization of bank reserves in the institutions of New York City and elsewhere is so dangerous? The reason for the failure in this feature of our system is the absence of a central reservoir, or a series of regional reservoirs of money, from which the banks may draw freely in time of need. The central or regional banks, if we can judge from European experience, would meet the difficulty which periodically exists in this country by enabling the banks in New York, or in any other district where a large demand for money exists, to sell a part of their assets in exchange for cash with which to meet the needs of their bank and individual depositors. The function of a central banking institution is primarily to enable the other banks of the country to convert their assets into money. A bank can not prevent a panic by showing its depositors the fine line of commercial paper or collateral loans in which it has invested the depositors' money. The only thing which will bring a sense of security and stop withdrawals is the development of a feeling of assurance that the bank can meet the claims of any and all depositors.

Most of our banking institutions receive deposits subject to repayment upon demand. In ordinary times they know

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about what these demands will average from day to day, and a sufficient amount of cash is kept on deposit with some other bank from which it may be immediately secured. The balance can be invested. A bank can not earn dividends by keeping the funds of its depositors lying idle in its vaults. The great problem of banking is to find investments which will keep these funds liquid, so that they can be converted or, better still, will convert themselves into money at short intervals. In general, the plan of investment followed by a bank is to keep a certain amount of cash, as we have said, on hand or on deposit with some other banking institution. This is known as its primary reserve. In addition to this it will make demand loans upon collateral, which, when called, will theoretically enable the bank to replenish its stock of cash by the aggregate of such items.

Mobilization of Reserves.—These two general classes of resources, however, make up the smaller part of the assets of our banking institutions. The major portion of a bank's capital and of the funds of the depositors is invested in short time commercial paper, maturing in not to exceed four months; in high grade bonds (preferably listed) which, because of a wide market, can be turned into cash upon short notice; and other securities of a less liquid character. Speaking generally, the greater proportion of a bank's assets can not, by the terms of the contract between the bank and its customers, be converted into money in less time than from thirty to sixty days. Unless the average bank can either borrow against its assets or sell them to some other institution, it will be forced to close its doors if a serious run occurs. The function of a central bank is to prevent this. If a bank or a number of banks are hard pressed, they go to the central institution and either sell a part of their assets or borrow against them, the central bank giving them money or a credit on its books as they may elect, for the aggregate amount of the sale or loan. The central bank in performing this service uses the funds which have been deposited with it by the other tributary banks, representing a portion of the cash reserve of these

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institutions. This is what is meant by the mobilization of reserves. If a run should occur upon every bank in the country at the same time, the failure of all would be inevitable, but this situation never happens. Fires do not start simultaneously in every house in the city. The funds which the unmolested banks have on deposit with the central institution are used by it to help those under pressure, and, what is of even greater importance, these banks in most of the foreign countries have the ability to issue bank notes to such an amount as may be necessary to meet any sudden and unreasoning demand for money, thus effectually ending the panic by enabling the member banks to pay off their depositors dollar for dollar.

As Mr. Andrew J. Frame, one of the leading bankers of the Northwest, phrased it, "We obtain restoration of confidence in the United States after we have had trouble, and after the wheels of commerce are stopped. What we want to do is to keep the wheels of commerce in motion, and by having some great reservoir of cash we can accomplish it. I care not what that method may be, providing we charge a sufficiently high rate of interest so that extra cash will come out in the day of trouble. I do not care if a charge of eight per cent is made for it, but that we can get relief so that we do not suspend cash payments. Within sixty or ninety days after the panic stops, I never knew the time yet that our depositors did not come back with their cash. Then when it does come in, we have a plethora of money and are ready to pay back what we have borrowed from the reservoir that furnished us the cash; we take our securities back home, normal conditions are resumed and running smoothly as before. Now, really, that is the whole thing in a nutshell, as I see it."

Hoarding in Panics.—In many ways Mr. Frame is right when he attributes most of the defects of our banking system to bank reserves. However, a great majority of bankers and students of the banking question would hardly agree that this is the only defect. There are certain collateral difficulties which arise out of the system of rigid reserves.

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One of the most serious of these is that when there is a general tightening of credit and financial conditions look dubious, many persons begin to draw money from the banks, hoarding it at home or in a safe deposit vault, because they fear a suspension of cash payments. This weakens the position of the banks, because the more cash they pay out, the smaller is their ability to extend credit; and hence they are forced to accentuate the trouble by curtailing loans. As soon as this tendency becomes apparent every bank inaugurates steps to strengthen its reserve. Money is called from reserve agents, repayments of call loans are demanded and steps are taken to put each bank in position to withstand a financial storm. The calling of loans forces merchants and speculators in merchandise and securities to sell their holdings at the best prices obtainable, in order to secure the necessary funds, since they now find it impossible to shift their loans from one bank to another. The drop in prices which follows further alarms the business community, undermining confidence, lowering the value of the collateral behind loans, and in other ways aggravating the situation and hastening a crisis.

Free Lending Impossible.—Experience has shown that this vicious cycle can be destroyed only by liberal lending on the part of the banking institutions. This tends to check the alarm, avoids the necessity of ruinous sacrifices and restores normal business conditions. Yet such a policy is impossible when the bank's ability to lend is being constantly curtailed by the reduction of its cash reserves.

The Money We Use.—In the past, emphasis has been laid upon our system of money as one of the chief causes of the weakness in our banking system. It is now generally recognized that our difficulties are more largely ones of credit than of money. To a certain extent, however, our money is one of the weaknesses in our financial system. The money which we use in this country can be divided roughly into two main classes: first, that put out by the government, and second, that issued by the national banks, in which the liability of the government is secondary. The

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money issued by the government may be divided into two general classes—gold and promises to pay gold.

Gold coin does not need the stamp of the government upon it to give it value. The purchasing power of gold coin is determined by the worth of the metal contained in it, and the stamp of the nation which has coined it is simply a guarantee that the metal is of a certain degree of fineness and the coin of a definite weight. Very little actual gold coin is in circulation. A large part of it is to be found either in the vaults of the Treasury, where it is used to support and give value to the government's promises to pay gold, or in the vaults of the banks. Also a large part circulates as gold certificates or "yellow backs," which are warehouse receipts issued by the United States government certifying that it has on hand an equivalent number of gold dollars, for which the receipt may be redeemed at any time. In addition to the gold and gold certificates the government has outstanding a considerable amount of money which has value largely because of the good faith and credit of the United States. This class of money includes silver dollars, silver certificates, United States notes, or greenbacks, and the subsidiary coin.

Our Token Money.—The metal contained in the standard silver dollar is at present worth about fifty cents. The silver certificate is but a warehouse receipt for a silver dollar, and, of course, can have no greater value than that coin. The silver dollar, however, is taken at its face value the country over because of the fact that the United States has stood willing for many years to redeem it, or the silver certificate, in gold. The silver dollar thus stands midway between gold coin and the greenback. The latter has no intrinsic value, and gets its entire purchasing power because of the good faith and credit of the government, supported by the reserve of \$150,000,000 in gold. The United States note or greenback is merely a promise on the part of the United States government to pay to the bearer on demand a stated number of dollars. While the government could have selected any sort of dollar with which to keep this obli-

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gation, the United States is now definitely pledged to redeem these notes upon demand in gold. In order to show good faith and to demonstrate to the world an ability to keep its promises, the Treasury Department is required to keep on hand \$150,000,000 in gold coin primarily for the purpose of redeeming some \$346,000,000 of United States notes, but also to protect \$490,000,000 of silver certificates, \$74,000,000 of silver dollars and \$178,000,000 of subsidiary coin.

Suggestions were made from some quarters that the Federal Reserve Act should carry a provision which would retire the United States notes or greenbacks, which were alleged to be a source of possible future trouble. The great majority of bankers, however, who appeared before the Congressional committees when the Federal Reserve Act was under consideration, did not share this view, holding that at the present time no difficulty need be expected from these notes.

Elasticity Lacking.—There is no elasticity in the money coined and issued by the United States government from year to year, except in the amount of gold coin. A definite limitation has been placed upon the issue of United States notes, silver dollars and silver certificates. Unless the amount of gold coin is increased or decreased—a thing difficult to accomplish quickly or on a large scale—there is no way in which an increased fund of money can be quickly provided to meet the needs of the country. The only form of money in the United States which fluctuates to any degree in volume is the national bank notes.

National Bank Notes.—A national bank note is the direct obligation of a national bank which issues it and which promises to redeem it on demand in lawful money. The notes are secured by a deposit by the issuing bank with the Treasurer of the United States, of an amount of government bonds equal in face value to the amount of notes issued. These bonds are held by the government as collateral security, and in the event of the failure of the bank to redeem these notes, the bonds are sold and the proceeds

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used for this purpose. The national bank notes are protected in other ways, one of which is the redemption fund—a sum of money in the Treasury at Washington equal to five per cent of the notes outstanding. This is used for the purpose of redeeming such notes as may be forwarded for redemption by other banks to the Treasury Department. The notes are also a first lien upon the assets of the bank and upon the liability of the stockholders thereof for debts of the institution.

There has never been any loss to holders of national bank notes. Whatever objection is made to them does not concern their safety. The profits of a bank issuing these notes are exceedingly small, amounting, according to the Comptroller of the Currency, to about 1.2 per cent per annum, providing the notes are kept in circulation all of the time. With such a small margin of profit it has been difficult to get the banks to issue the notes in a quantity sufficient to give an adequate circulating medium in times of great industrial activity. What is even worse, the expense and trouble incident to their retirement discourage the banks from taking steps to retire a part of their circulation; with the result that when business slackens, and the demand for money has correspondingly decreased, these notes are not retired, but pile up in the vaults of the bank. To be exact, they generally pile up in the vaults of the State banks and trust companies, which can count them as a part of their cash reserve. A national bank can not count either its own notes, which are its liabilities, or the notes of any other national bank as a part of its cash reserve.

This has proved a source of weakness in the past, for it has been impossible for the national banks to strengthen their cash reserves in times of great industrial prosperity through the issue of these notes. While the national banks can not count national bank notes as part of their reserve, yet they are of value to them in times of stress, because they can be paid out over the counter, satisfying the demands for cash, the lawful money being retained in the bank's vaults as its reserve. Primarily bank notes should be issued for

circulation in the hands of the public, and this theory has been followed in the drafting of the Federal Reserve Act.

Bank Note Elasticity Insufficient.—Experience, particularly in the panic of 1907, has shown, however, that the mere issue of bank notes will not solve the problem. The difficulty is only in part a lack of currency in the hands of the public. What is much more important is the creation of some means by which the lending power of the banks can be increased at critical times. An ideal system of money is one which will expand as the needs of business require an additional supply, and which will automatically contract when this additional need is over. It is not sufficient to provide for expansion, because unless a sure method of contraction is included, disaster will surely follow. The amount of money in circulation must bear a relation to the volume of business which is then to be financed. Our supply of money in the past has had no direct relation to business whatever. Unlike the monetary system of Canada, where the notes of the banks expand and contract in amount automatically with the ebb and flow of business, we have just as much money in the dull times of the year as we have in the periods of greatest activity. The result has been that we have a plethora of money in the dull months and a currency famine in the most active periods.

Lack of Central Control.—One of the most serious defects in our banking system is the absence of any strong, quieting hand which can enforce united action by the banks along intelligent lines. There has been no power in the United States to control the aggregate expansion of bank credits with relation to the aggregate amount of bank reserves. Credits are allowed to expand without any thought being taken of the reserve which must carry them, until we reach a top-heavy condition where a crash is inevitable. This expansion encourages speculation, the over-extension of business operations, and an unhealthy condition in our security markets. The absence of any central authority results in no provision being made for those times when an exceptional amount of currency is needed for circulation

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among the people, or when an exceptional amount of credit is needed to take care of the business of the country. We rush blindly along, no bank taking a national view, but each interested solely in its individual profits, until the rope of credit is stretched to the limit of its strength. When the slightest unusual strain comes, a break is inevitable.

We have here the four most important defects in our banking system—decentralized reserves, immobilized commercial paper, inelastic note issues, and the absence of a central controlling authority. Many others might be stated and explained, such as the hoarding of money in our independent treasury system, the absence of any central authority which will protect the gold reserves of the country, the inability of our banks to finance foreign trade upon as favorable a basis as that abroad, the lack of any public discount market where commercial paper can be sold under the most favorable conditions and at lower rates than we have ever enjoyed, and many other important matters of a similar character. Each of these defects in our banking and currency system, however, will be taken up and analyzed in conjunction with the provisions of the Federal Reserve Act which aim to correct them. All that we need do at the present time is to secure a general view of the problem which confronts the country and which the Federal Reserve Act attempts to solve. The fault is not one inherent in our method of banking. It has not arisen from mismanagement of our banking institutions. It is due to the absence of certain features in our banking system which are found in the systems of other countries of the world. Instead of destroying what we have, there should be erected upon it a superstructure, which will enable the banks to handle the problems with which they have heretofore unsuccessfully struggled. Reform has very properly been not destruction, but construction on the basis of that which has proven good and which has been of such great value in the upbuilding of this country in the last fifty years.

CHAPTER II

THE NEW LAW SUMMARIZED

Earlier Legislation.—The need of a general revision of our currency and banking laws has been felt for years, and minor changes have, from time to time, been made. Among the most recent was the Currency Act of March 14, 1900, which was an attempt to lessen the dangers that lurked in the greenbacks, the Treasury Notes of 1890, and the silver dollars. No matter how much its provisions may have added to the safety of our money supply, there was still no elasticity; and after the panic of 1907 another effort at improvement was made. The result was a temporary measure—the Aldrich-Vreeland Act of May 30, 1908. Under its provisions the national banks may organize themselves into National Currency Associations. A member bank, if it already has outstanding a circulation secured by United States bonds equal to forty per cent of its capital, is allowed to extend its note issues upon other classes of securities, until the total is equal to the sum of its capital and surplus. The additional notes are subject to a tax which is relied upon to force their retirement.

Objections to the Aldrich-Vreeland Act.—This Act was intended to be only an emergency measure and was to expire by limitation on June 30, 1914. For a time the banks hesitated to form the currency associations; but after the Secretary of the Treasury gave a somewhat generous interpretation to some of the doubtful points and strongly urged the importance of action, a number were formed. The \$500,000,000 of notes (the maximum total issue possible) were printed and placed in the various United States sub-treasuries for use when needed. Thus far they have not been used. The delay incident to securing the notes, the necessity for a bank to reveal to the other members of the currency association its need for an emergency issue, the

general inertia of the banks toward any new methods, and perhaps a lack of real occasion for using the law, have contributed to make the legislation inoperative. It may, of course, be true that its mere existence on the statute books has been of value in preventing the development of panic conditions.

One of the sections of the Aldrich-Vreeland Act provided for the appointment of the National Monetary Commission, composed of Senators and Representatives in Congress. This Commission reported the plan that has generally been known as the Aldrich Bill. Strong opposition to its passage developed and it was never acted upon. In the meantime the reaction against the leadership and policies of the conservative Republicans became so pronounced that the task of reorganizing our monetary and banking system fell to the Democrats.

The Federal Reserve Act.—The bill that became a law in December, 1913, was introduced into the House of Representatives on June 26 of the same year. After a few slight changes in the Committee on Banking and Currency, to which it was referred, it was reported to the House and passed. It promptly appeared in the Senate, which referred it to the Committee on Banking and Currency, whose members found themselves unable to agree on a report. Finally a decision was reached to return to the Senate the House Bill and with it two others. One of them was endorsed by the Democratic members under the leadership of Senator Owen, the other by the Republican members who were joined by Senator Hitchcock, a Democrat. As finally passed by the Senate and later modified by the conference committee, the Act bears more resemblance to the "Owen" draft than to any of the others.

Action Not Hasty.—Although it might appear that this bill had been rushed through both the House and the Senate, it would be incorrect to assume that the measure was passed without adequate consideration. In fact, such was not the case. The subject has been before the country in a general way for years. It had been discussed both in

Congress and by the public at the time of the report of the National Monetary Commission, and the introduction into Congress by that body of the so-called Aldrich Bill. The Owen-Glass Bill itself received thorough consideration. Hearings on the subject were held during January and February, 1913, the testimony given at that time by the witnesses who appeared filling 745 printed pages. The Bill introduced into the House of Representatives by Mr. Glass on June 26, 1913, remained under consideration by the House Committee on Banking and Currency until September 9, when it was reported to the House and passed by it on September 17. The Senate Committee on Banking and Currency had anticipated the Bill's passage and had begun hearings on the subject on September 2, continuing them until November 6. The testimony taken, together with the index, fills three large volumes, with a total of 3259 printed pages. In addition to the extensive investigations and reports by the National Monetary Commission and the hearings just described, there was held in 1912 the Pujo Committee's investigation of the alleged "Money Trust." There was thus extensive consideration of the entire question from many different angles.

The New Law.—By the provisions of the Act the Continental United States is to be divided into from eight to twelve districts, in each of which there is to be organized an institution to be known as a Federal reserve bank. The capital of each Federal reserve bank must be at least \$4,000,000 and is to be furnished primarily by the member banks of its district. National banks must subscribe, and State banks and trust companies may subscribe, each to an amount equal to six per cent of its own capital and surplus, all subscribing institutions being known as member banks. One-half of the subscription must be paid within a limited time, the balance remaining subject to call. National banks must comply with the provisions of the Act within one year or forfeit their charters. If the stock subscriptions by these member banks are inadequate, stock may be offered to the public, and if then the amount secured is insufficient,

the balance needed will be allotted to the United States, to be paid for from Treasury funds.

Each of these reserve banks is to have its own board of nine directors, six of whom are to be chosen by the member banks and three appointed by the Federal Reserve Board. The Secretary of the Treasury may order the deposit with the Federal reserve banks of the general funds in the Treasury of the United States. They are to act as fiscal agents of the United States government. The Secretary of the Treasury may also use member banks as depositaries, but may not use any banks not members of the system for this purpose. Reserve requirements of banks joining the system are lowered. A part of the reserves they are required to keep must be on deposit with the reserve banks, a part must be in their own vaults, and the balance must be with the reserve banks, in their own vaults, or both. Earnings of the reserve banks are to be divided between member banks, a surplus fund for the reserve bank, and a franchise tax to the United States. Branches may be established within its district by any Federal reserve bank.

The Reserve Banks.—The chief work of the reserve banks will be the rediscounting of commercial paper. A member bank may replenish its reserves when it wishes by taking to the reserve bank of its district any commercial paper whose date of maturity at the time is not more than ninety days distant. There are stipulations also with regard to the discount of a limited kind and amount of paper with a maturity not exceeding one hundred and eighty days. The reserve bank is empowered to advance funds on this paper, or in other words to "rediscount" it, at a rate subject to review and determination by the Federal Reserve Board.

Organization and Control.—The Secretary of the Treasury, the Secretary of Agriculture, and the Comptroller of the Currency are to act as "The Reserve Bank Organization Committee," whose duty it shall be to determine upon the districts and to supervise the organization of the reserve banks. The Federal Reserve Board, which succeeds the Organization Committee, has sweeping powers of super-

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vision and control. This Federal Reserve Board is to be composed of the Secretary of the Treasury of the United States, the Comptroller of the Currency and five other members appointed by the President of the United States by and with the consent of the Senate. Each of the five receives an annual salary of \$12,000 and his travelling expenses, the sum of \$7,000 per annum being added to the former salary of the Comptroller of the Currency. As has been stated, the powers of this board are broad. It may examine the accounts and require reports from each reserve bank, publishing weekly a statement showing the condition of each reserve bank and a consolidated statement for all reserve banks; require one reserve bank to rediscount the discounted paper of another; suspend the reserve requirements of both the reserve and member banks; supervise the issue and retirement of Federal reserve notes; and change the number of reserve and central reserve cities or reclassify the existing ones. It may create new reserve districts and rearrange the old ones; appoint three of the nine directors of each reserve bank; suspend or remove any officer or director of such bank; grant to any national bank, by special permit, the right to act as trustee, executor, administrator or registrar; and finally perform many miscellaneous duties that naturally fall under its jurisdiction as a supervising body.

The Federal Advisory Council is to be composed of one member from each district, chosen by the board of directors of the reserve bank located therein. This council may confer with the board on general business conditions; make oral or written representations to the board; and call for information and make recommendations upon several specified matters.

Note Issues.—A plan is provided by which the national bank notes may be gradually retired and replaced by the notes of the reserve banks. To meet the need for an elastic currency the Act provides also for Federal reserve notes to be issued to the reserve banks at the discretion of the Federal Reserve Board. Application by reserve banks for

these notes must be accompanied by a tender of the commercial paper and other obligations that are acceptable for rediscount at the reserve banks. No reserve bank may pay out the notes of another except under penalty of a tax of ten per cent. The notes are redeemable at the United States Treasury in gold and at any reserve bank in either gold or lawful money. Each reserve bank must maintain against its deposits a reserve in gold or lawful money of at least thirty-five per cent; and against its Federal reserve notes in actual circulation, a reserve in gold of forty per cent. A graduated tax is provided for any deficiency in the reserves held by the reserve banks or by the member banks.

Reserves.—Reserve requirements of all subscribing member banks are to be gradually altered. By the end of a period of thirty-six months, a bank in New York, Chicago or St. Louis will be required to keep a reserve of eighteen per cent of its demand and five per cent of its time deposits. Six-eighths of this amount is to be in its vaults, seven-eighths must be with the Federal reserve bank of its district, and the balance either in its vaults or in the Federal reserve bank, or in both, at its option.

The banks in forty-seven other cities will be required to keep a reserve of fifteen per cent of their demand deposits and five per cent of their time deposits. Five-fifteenths of this must be in their own vaults, six-fifteenths must be with the reserve bank of the district and the balance in their own vaults, or with the reserve bank, or in both, as they elect. Banks located elsewhere must keep a reserve of twelve per cent of their demand deposits and five per cent of their time deposits. Four-twelfths of this amount must be kept in their own vaults, five-twelfths with the Federal reserve bank and the balance either in their vaults or with the Federal reserve bank, or both, as they prefer. These regulations apply both to national banks and to State banks and trust companies that may become members of the system. A Federal reserve bank may receive from member banks, as reserves, eligible discounted paper to an amount not exceeding one-half of each installment required.

Other Provisions.—The provisions as to bank examinations are changed in several important particulars. Examiners are to be paid salaries instead of fees, the expense being assessed upon the banks examined, in proportion to resources; while loans and gratuities to examiners are strictly forbidden. A national bank not located in New York, Chicago or St. Louis may lend on improved and unencumbered farm land within its district not in excess of fifty per cent of the value of the property and for a period not longer than five years, the aggregate of such loans by any bank not to exceed twenty-five per cent of its capital and surplus or one-third of its time deposits. The Federal Reserve Board may from time to time add to the list of cities in which such loans are forbidden. National banks with a capital and surplus of \$1,000,000 or more may, under certain regulations and supervision, establish foreign branches. The Aldrich-Vreeland Act of May 30, 1908, is extended to June 30, 1915, and a number of its provisions are altered.

Later Chapters Summarized.—The following chapters are devoted to an elaboration of this brief summary. Each important topic will be treated separately, explaining in detail the provisions of the bill, the changes thus introduced into our banking law and practice, and a comparison with similar features in the banking system of other large countries.

From what has been said it will be apparent that the new law attempts to introduce certain needed reforms without tearing down any more than is necessary of the system under which we have been working. A violent change in banking law, that would compel completely new methods of conducting business and carrying on banking operations, might easily have done more harm than good. Business habits and customs that are the product of years of growth can not easily be altered.

Instead, there has been an endeavor to build upon the old. In spite of many changes in the regulations governing the national banks, the great mass of their operations will remain substantially the same as before. There has merely

been imposed upon them a sort of superstructure, an organization to which they may in need turn for help and by which they will be, to a considerable extent, supervised. How successful this attempt may prove only the future will reveal. Many changes that appeared of little consequence to the framers of the law may be revolutionary in their effects. Many of the proposals made with the intent of helping the banking community and the public may fail utterly. It is to be hoped that the country may adapt itself to the new conditions with little or no difficulty.

CHAPTER III

THE REGIONAL SYSTEM

A Central Bank.—In the numerous discussions concerning the improvement of our banking and currency laws, plans for a central bank have been urged more often than almost any other proposal. In nearly every leading country of the world there is found a large bank acting as the fiscal agent of its government and as banker for the other banks of the country. Each assumes a large measure of responsibility for the banking situation and for the supply of gold within its own country, holding the reserves of the other banks and, so far as possible, compelling them to conduct their business in a conservative manner. Scotland and Canada are the only countries of importance in which this situation is not found, while England, France, Germany, Russia, Belgium, Austria, Italy and Japan are the conspicuous illustrations. In our early history we too had experience with similar institutions—the First Bank of the United States from 1791 to 1811, and the Second Bank of the United States from 1816 to 1836.

It has thus been somewhat natural that there should be frequent proposals for a single central institution in the United States. Those who favored it have contended that only a central bank would be able to establish a more uniform or even a lower discount rate, to control the movements of gold into and out of the country, and to hold for immediate use anywhere the supply of gold, which is the ultimate reserve of all the banks. As proof of these contentions, our own early experience and the methods in use abroad have been cited.

Objections to a Central Bank.—On the other hand, there is in the United States a deep-rooted objection to any centralization of resources and power. The same attitude of mind that animated Andrew Jackson in the 30's, and

that at the present time prefers State rather than Federal control of local matters, finds the idea of a central bank repugnant. It has also been urged that the vast extent and differences in the economic development of our territory and the variety of our resources make necessary a system fundamentally different from that found elsewhere; that rates of discount and policies may be acceptable in one section that are not at all desirable in another; and that cash reserves can be guarded better by a number of banks than by a single central institution. Thus under a regional system rumors of weakness in New York City would not create distrust in New Orleans, since the banks and people of the South would not be primarily dependent on New York, but on a regional bank in New Orleans. Perhaps political considerations and questions of party policy have also had an influence.

Europe and the United States Contrasted.—Inasmuch as the regional system is the form chosen by Congress, the reasons for the choice should be set forth in their main outlines. Perhaps no clearer way of stating the problem can be found than to contrast conditions in Europe with those in the United States. The mere statement of the comparative area in square miles is illuminating. The United States has an area of 2,973,890 square miles, a territory greater in extent than all Europe, exclusive of Russia. Even if Alaska be omitted, there are 2,383,006 square miles within our domain; while Europe, excluding Russia, has but 1,936,320 square miles. A contrast of our great area with the 121,391 square miles in the United Kingdom, the 209,000 square miles in Germany and the 207,220 square miles in France suggests at the outset that a system successful in any one of those countries might fail utterly here. If only eight regional districts should be established their average area would be 297,888 square miles, a territory greater than that of any country in Europe except Russia. If the United States should be divided into twelve districts their average area would be 198,583 square miles, an extent which is exceeded, and that but slightly, by only Russia, France and Germany.

The enormous size of our country creates problems of transportation and communication which are staggering. Of even greater importance are the variety of our resources, the diverse habits of our people and the dissimilarity in business methods which are sure to exist in so large an area. Climate, temperature, and soil differ greatly in the various groups of States. The history and the present stage of development of the several sections of the country vary widely. The character and extent of our natural resources, both developed and undeveloped, furnish present and future problems that are peculiar to each region. We might, in fact, say that the United States in itself furnishes as great a variety of problems as does all Europe combined, with the single exception that all our people use the same language and are one nation.

Trouble Localized in Europe.—Would a single central banking institution be able at the present time to control the reserves and solve the problems of all Europe? The question is certainly an open one and a negative answer would suggest that perhaps the same conclusion should be drawn regarding the United States. The operation of the system in Europe has shown that financial trouble in France does not affect Great Britain and Germany, unless it becomes so serious that national boundaries are insufficient as a check. European experience gives rise to the hope that disturbances in one section of the United States may easily be prevented from spreading throughout the country, if we devise the proper banking machinery.

The Regional Plan.—Wisely or unwisely, the final decision has been against a central bank and in favor of a number of institutions, known as Federal reserve banks, over which there is placed a controlling body named the Federal Reserve Board. For convenience we may, in this chapter and elsewhere, adopt the terms suggested in the first section of the new law, which reads as follows: "Wherever the word 'bank' is used in this Act, the word shall be held to include State bank, banking association, and trust company, except where national banks or Federal reserve

banks are specifically referred to. The terms 'national bank' and 'national banking association' used in this Act shall be held to be synonymous and interchangeable. The term 'member bank' shall be held to mean any national bank, State bank, or bank or trust company which has become a member of one of the reserve banks created by this Act. The term 'board' shall be held to mean Federal Reserve Board; the term 'district' shall be held to mean Federal reserve district; the term 'reserve bank' shall be held to mean Federal reserve bank."

The Work of Organization.—The law provides that "as soon as practicable" the Secretary of the Treasury, the Secretary of Agriculture and the Comptroller of the Currency, acting as "The Reserve Bank Organization Committee," shall designate not less than eight nor more than twelve cities to be known as Federal reserve cities, and shall divide the continental territory of the United States, excluding Alaska, into districts, each district to contain one such city. In each of these cities there will be established a Federal reserve bank, which later may have branches in various parts of its district. The decision of this committee is subject to review only by the Federal Reserve Board. In the choice of the cities and in the apportionment of the districts emphasis must be placed on "the convenience and customary course of business" rather than on State boundaries. The Reserve Board may readjust these districts and from time to time create new ones, not to exceed twelve in all.

Districting the United States.—This task of districting the country will be difficult because of the complex nature of the problem, the lack of detailed information on the subject and the strong rivalry among the cities anxious to have one of the reserve banks. The committee must take into account the distance from one city to another, the relative importance of the business done in the different centers, the present movements of commerce between these localities and the convenience or inconvenience to trade if the present movements are altered. Attention must also be given to the fact that the new system will impose powers and duties upon

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the new institutions that may change the existing situation. It may be that some of the present channels of business are by no means incapable of change and would be improved by alteration.

Before coming to any conclusion there should be a thorough analysis of the movements of commodities, of the methods now used in paying for them, and of the movements of cash from one part of the country to another. The extent of the borrowing from one section by another, the method by which these funds are loaned and the security given should also be understood, since it will be desirable to have each district as independent of the others as possible. Since the eastern sections of our country were settled and developed before the West and the South, the cities of that region are larger in population and in banking resources, a fact that will, to a considerable extent, offset the shorter distances between them.

The Organization Committee.—At the time of the passage of the new law the office of the Comptroller of the Currency was vacant, no successor to Mr. Lawrence O. Murray, the former incumbent, having been appointed. Since "a majority of the organization committee shall constitute a quorum with authority to act" the other two members,—Secretary McAdoo of the Treasury Department and Secretary Houston of the Department of Agriculture,—at once began consideration of the problem and made public their plan of action. Beginning in New York City on January 4, 1914, they held hearings that are expected to continue in one after another of a number of leading cities. Representatives of the sections of the country contiguous to each city have been given an opportunity to appear and to express their views. The attitude of the committee toward the problem and the factors they consider most important are indicated by the following quotations from an announcement by them on December 26, 1913:

"The committee desires to be informed particularly upon the following points, which are considered primary factors in determining the boundaries of the proposed districts and the location of the Federal reserve banks:

"First. Geographical convenience, which involves transportation facilities and rapid and easy communication with all parts of the district.

"Second. Industrial and commercial development and needs of each section, which involves consideration of the general movement of commodities and of business transactions within the districts and the transfer of funds and exchanges of credits arising therefrom.

"Third. The established custom and trend of business, as developed by the present system of bank reserves and checking accounts. In laying out the districts and establishing the headquarters for reserve banks, every effort will be made to promote business convenience and normal movements of trade and commerce.

"Political considerations will not be permitted to influence the committee in determining these important questions. While the committee appreciates the local pride and sentiment which are prompting many cities to urge their claims, the committee, nevertheless, must appeal to the patriotism of the country to assist it in arriving at sound conclusions through consideration of fundamental and vital factors. Purely local sentiment and pride must yield to the common good in order that the system itself may accomplish the purposes for which it was designed, namely, to secure to the business of the country the elastic system of credits and the stability of conditions so long imperatively demanded.

"The committee will not, therefore, be able to receive delegations urging the claims of particular cities for preference as the headquarters of the reserve banks. The claims of all cities will be considered upon their merits in view of all the facts which will be developed through the investigations. The purpose of the committee is to go about this work in a thoroughly practical and businesslike way, to accomplish it at the earliest possible moment but without undue haste, and only after full consideration of the needs of every section of the country."

While this is being written, the hearings are being held. Predictions of the outcome are entirely unnecessary since the question will be decided at so early a date. Political and sectional pressure will doubtless be very heavy. The early announcement by the committee of the factors which they expect to consider is reassuring and gratifying.

The Proper Number of Districts.—Although speculations as to the boundaries of the districts or even as to the cities in which the reserve banks are to be located are futile, a few of the phases of the problem should be presented. The first is the number of districts to be established. The law specifies a minimum of eight and a maximum of twelve, and the organization committee may decide upon any num-

ber within these limits. A rumor has been circulated to the effect that they plan to choose the maximum number at the outset. This report may be false, but such a decision appears upon its face to be a wise one. If less than twelve districts are organized at once, there will be continued and persistent agitation from the disappointed cities for the addition of new districts, until the maximum number have finally been designated. So many are seeking the honor of a reserve bank that some must of necessity be omitted. The settlement of the whole matter at the outset will probably mean less trouble in the end.

It must also be remembered that the addition of other districts will be difficult to effect. If eight are designated at the outset, the addition of two or four more at the end of a year, for example, means the undoing of much that has already been accomplished. A district already organized and in working order must be divided into two smaller ones, or several of the older districts must each yield a part of its territory to form a new one. It might even be that an old district would be abolished and part of its territory given to one new district and part to another. The proper location of the reserve banks for eight or ten districts might be different than for twelve districts. If eight are established and the others added later, geographical considerations alone might require the removal of a reserve bank from the city in which it was first located. A complete rearrangement of boundaries might become a necessity, local interests and jealousies would then be aroused and many of the problems involved in the original selection would again arise for solution.

The Effect on Business.—But these considerations are not the most important. The introduction of the new system means a very marked change in banking methods and in business. More careful scrutiny of paper, a new location of reserves, the privilege of rediscounting, more rigid examinations and several modifications in accounting methods are among the most important changes for the banks; while the business public may to advantage also

modify its practices to a considerable extent. No matter how reasonable these changes appear, nor how much better experience may prove them to be, account must be taken of the influence of conservatism and prejudice. Trade movements may not be modified to suit the new machinery, but methods of payment and collection will surely be affected. Changes breed hesitancy and distrust, and as few as possible should occur. Hence it is the part of wisdom to settle the problem as fully as possible at the outset by a choice of the full number of districts.

The Demand for Reserve Banks.—Perhaps a few words should be said concerning the present rivalry between the cities that are eager for reserve banks. It seems to be generally conceded that New York and Chicago will be on the list because of their location and their financial prominence. San Francisco and New Orleans come next, but upon the rest of the number there is no consensus of opinion. Boston, Philadelphia, Baltimore and Washington are asking for recognition in the East; Atlanta and Houston, (Texas) are mentioned for the South; St. Louis, Kansas City, Memphis, Cincinnati, Cleveland and Minneapolis in the Middle West; with Denver, Los Angeles and Portland (Oregon) in the West. Still other cities have been suggested, but most of the discussion centers about the ones named. Only the most careful sifting and weighing of the mass of evidence that will be presented will make a proper choice possible. The committee is authorized to employ counsel and expert aid, to take testimony, and in other ways to conduct such investigations as may be deemed necessary.

The Size and Strength of the Districts.—To what extent the size of the banking institutions in a given city may affect its selection as the location of a reserve city is difficult to determine. No reserve bank may commence business with a subscribed capital of less than \$4,000,000. If all of this sum is to be subscribed by banks, each district must contain member banks with a combined capital and surplus of at least \$66,666,666. A suggestion of the significance of this is found in the fact that the combined capital and

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surplus of all the national banks of the United States on October 21, 1913, was \$1,785,705,285. Just how many banks will join the system is uncertain, although the indications at present are that a very large number will enter. Perhaps it is safe to assume that enough State banks will join to offset whatever refusals there are on the part of the national banks. In that event, we may accept tentatively the statistics of the national banks as indicative of the strength of the system.

The amount of the maximum possible subscription from national banks is six per cent of the combined capital and surplus, or \$107,142,317. Divided among twelve districts, the average for each is \$8,928,526. Six per cent of the combined capital and surplus of the national banks of New York City is \$14,958,300, of Chicago \$4,143,000, of Philadelphia \$3,723,900, and of Boston \$2,906,700. It is evident that if a reserve bank is located in any one of these cities the district surrounding each must be closely limited unless the areas of the other districts are made so large as to be unwieldy merely from their size. If they are made small, it may be necessary to supplement the bank subscriptions by offering stock to the public in order to secure the \$4,000,000 required for each. A district which would include the New England and Eastern States would contain national banks with a combined capital and surplus of \$852,521,773.38, six per cent of which would be \$51,151,306.39, or nearly one-half of the subscriptions to be secured from all the national banks in the United States.

Entering the System.—The number of districts and the location of the reserve banks having been determined, the committee will proceed with the work of organization. Every national bank is required, and every other eligible bank, as well as every trust company in the District of Columbia, is authorized to signify in writing, within sixty days after the passage of the Act, its acceptance of the terms and provisions thereof. The Act was signed by President Wilson on December 23, 1913, and the committee has announced that the national banks must signify their accept-

ance not later than February 22, 1914. If a national bank within a reserve or central reserve city does not signify acceptance before that date the organization committee or the Reserve Board may, at its discretion, give thirty days' notice to such bank, at the end of which time it shall cease to act as a reserve agent for other banks under the provisions of the National Bank Act. If this thirty days' notice is promptly given on February 22, the banks in question could be compelled to surrender these privileges by March 24, 1914. Although the organization committee and the Reserve Board are allowed discretion in the matter and may not see fit to act at once, they have the power to compel a prompt decision by any national bank in a reserve or central reserve city. The announcement made on December 26, 1913, suggests their intention to take prompt action, since it states that "all national banks are required to signify their acceptance" on or before February 22, 1914. If any national bank in a reserve or central reserve city fails to act before that date it may at once receive the necessary thirty days' notice that it is to lose its reserve privileges.

National Banks Must Enter.—The law, however, specifically compels all national banks to decide the question within one year, i.e., by December 23, 1914. No matter what leniency may be shown by the committee or by the Reserve Board, national banks which have not become member banks by that time will forfeit their charters. Thus within one year all national banks must enter the system, become State institutions or withdraw from the banking business. State banks are allowed to enter if they wish, but are not required to do so.

The Question of Compulsion.—This provision that all national banks failing to enter the system within one year shall forfeit their charters has raised several questions. The committee has announced that a vote by the directors in favor of entering the system shall be considered sufficient approval without a reference of the matter to the stockholders. But if the directors vote adversely, they must

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refer it to the stockholders for final decision, since the adverse vote would mean the loss of the bank's charter.

Since the constitutionality of compelling the banks to enter has been questioned, there has been inserted in the Act the following provision:

"Any noncompliance with or violation of this Act shall, however, be determined and adjudged by any court of the United States of competent jurisdiction in a suit brought for that purpose in the district or territory in which such bank is located, under direction of the Federal Reserve Board, by the Comptroller of the Currency in his own name before the association shall be declared dissolved." To cover other violations than merely that of failing to become a member, the following is added to the paragraph from which the above quotation is taken. Its significance for directors of national banks is so obvious as to need no comment.

"In cases of such noncompliance or violation, other than the failure to become a member bank under the provisions of this Act, every director who participated in or assented to the same shall be held liable in his personal or individual capacity for all damages which said bank, its shareholders, or any other person shall have sustained in consequence of such violation."

The Banks Ready to Enter.—There seems little reason to doubt that most of the national banks will enter promptly. Even before the report of the conference committee had been passed by the Senate and the House of Representatives, the Secretary of the Treasury received large numbers of letters and telegrams indicating a desire to join. But even if some of the banks should hesitate, the reserve banks need not be crippled by a lack of capital. Each must have a subscribed capital stock of at least \$4,000,000, of which each member bank must subscribe an amount equal to six per cent of its capital and surplus. One-half of this must be paid from time to time within six months of the call of the organization committee or of the Reserve Board. The other

one-half is subject to call. An early demand for this latter amount would involve such hardship for member banks that it might be unwise to demand it, and fortunately another resource is open. If subscriptions by the banks are, in the judgment of the organization committee, insufficient, the general public may be asked to furnish such additional amounts as are needed. If there still is not enough, the United States itself will purchase the necessary balance, paying for it with money in the Treasury not otherwise appropriated. This alternative of an appeal to the public and to the government for capital lessens the emphasis that must be given to the capital and surplus of the banks in a proposed district. It might be possible, for example, to locate a reserve bank in Seattle, even though the banking capital and surplus in the contiguous territory were insufficient for the purpose.

Prompt Action Possible.—There is thus every reason to believe that the organization committee may proceed promptly with its work. The next step is to file with the Comptroller of the Currency a certificate showing the limits of the districts and the Federal reserve city designated in each. The Comptroller will forward to each national bank, and to such other banks as are declared eligible by the organization committee, an application blank containing a resolution in proper form for adoption by the directors of the bank wishing to join. The organization committee will then designate any five of the banks that apply to execute a certificate of organization which shall state the name of the Federal reserve bank, the territorial extent of its district, the city and State in which it is to be located and other necessary information. This certificate, after acknowledgment before a judge of some court of record or a notary public, is to be transmitted to the Comptroller of the Currency, who will file and record it.

By this process the Federal reserve bank becomes a body corporate with certain specified powers which will later be described. No business may be transacted, except such as is

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incidental and preliminary to organization, until authorization to do so is granted by the Comptroller of the Currency. The reserve bank's affairs are to be directed and controlled by a Board of Directors whose chairman is appointed by the Federal Reserve Board and who will be known as a "Federal reserve agent." This chairman will direct the election of the directors in a manner described in a later chapter. In case he has not yet been appointed this work will be directed by the organization committee.

CHAPTER IV

OWNERSHIP

THE regional system having been chosen, the next important problem to be settled by Congress was that of ownership. The decision was in favor of compulsory subscription by the banks to be supplemented, if necessary, by an appeal to the public and finally to the government itself.

Value of Public Subscriptions.—There is much to be said in favor of subscription by the general public. To a constantly increasing extent, national, State and local governments are offering their securities direct to the people. Such a procedure increases popular interest in all governmental matters, affords a safe investment for funds, and makes available for public uses a large amount of capital that otherwise might be hoarded. Also, it may be urged that our new system is an enterprise of such general interest and importance that it should be owned by the people; that through public subscription more capital could be secured and the reserve banks thus be made stronger; and that ownership by the banks of an institution that is to compete with them in some lines of business and regulate them in others, is incongruous and dangerous.

Our own history and the practice of other countries are interesting. The stock of the First Bank of the United States was \$10,000,000, of which four-fifths was owned by the general public and one-fifth by the government. The \$35,000,000 capital of the Second Bank of the United States was subscribed for by the public and the government in the same proportions as in the case of the earlier bank. The bank of England has over 10,000 stockholders, no stock being held by the government. There are no restrictions upon ownership and transfer of this stock so that banks may, if they wish, become stockholders. The Reichsbank

of Germany has 18,000 stockholders, the Bank of France 32,000, the Bank of Italy nearly 10,000 and the Bank of Switzerland 10,000. In none of these countries are there requirements or restrictions upon ownership, except that in Germany officials of the Reichsbank may not own shares, and in France about 6,000 shares of the Bank of France, belonging to widows, minors, etc., are marked "not transferable." Precedent and practice seem to be either in favor of wide ownership with no restrictions or a partial or even complete ownership by the government. As an illustration of the latter solution the Bank of Sweden, which belongs to Parliament, there being no stockholders, may be cited.

Ownership vs. Control.—Before presenting the arguments for bank ownership it may be well to observe that there is a very pronounced difference between ownership and control—a fact that is often forcibly impressed upon stockholders of companies whose directors have not always considered the best interest of the real owners. If control of the reserve banks be placed elsewhere than with the banks of the country, the alleged danger of bank ownership might be lessened. This has been attempted by the creation of the Federal Reserve Board with very sweeping powers, and by leaving a large number of very important questions to be decided by the Secretary of the Treasury. It is also to be observed that the reserve banks are not to have as close business relations with the public as do the leading central banks of Europe. These two considerations weaken, even though they do not fully answer, the contentions against bank ownership.

Arguments for Ownership by the Banks.—There are several arguments directly in favor of requiring the banks to purchase the stock. The reserve banks are to hold a considerable part of the reserves of the member banks throughout the country; the Secretary of the Treasury has the discretionary power to deposit with them all or any part of the general fund of the Treasury, not including the redemption fund; and they may be required to act as fiscal agents of the government. Although subject to very ex-

PLICIT general control by the Reserve Board, the majority of the board of directors of each reserve bank are to be chosen by the member banks, and a considerable part of the success of such an institution will be dependent upon the hearty coöperation of the banks. As stockholders and depositors their incentive to helpfulness will be greatly increased. They will have little to gain and much to lose by hostility to such a bank. Their reserves are with it and they have an opportunity for a six per cent return on their holdings of stock.

The Banks Held Responsible.—Their stock ownership makes it possible for Congress to justify itself "in putting on the member banks the prime responsibility of administering these banks and safeguarding their own reserves and their own capital stock, and making them responsible to the country for safeguarding the welfare of the national banking system and protecting the national gold supply under the safeguard of governmental supervision." This sense of responsibility will render safer the large deposits of government money, and will also protect the United States in its extension of credit through the new note issues which are "the obligations of the United States loaned to the reserve banks against commercial bills."

These considerations do not, however, touch the constitutionality or the justice of requiring the national banks to subscribe. The justice of the requirement is dependent largely on the advantages to them of membership in the system. In the National Bank Act, Congress has specifically reserved the right to amend, alter or repeal the Act itself, a reservation which may fully cover the right of Congress to require subscriptions. The writers of this volume do not consider themselves competent to pass upon this point, and express no opinion. Any bank wishing to test this compulsory feature has open to it the courts of competent jurisdiction.

The banks then are to be offered the first opportunity to subscribe for stock, with the public next and the government last. Stockholders are subject to double liability, and

none except member banks are allowed to subscribe for or to hold at any one time more than \$25,000 par value of the new stock. Stock offered to the public shall be known as "public stock." That taken by the government is referred to in the Act as "United States Stock." It is "to be held by the Secretary of the Treasury and disposed of for the benefit of the United States in such manner, at such times, and at such price, not less than par, as the Secretary of the Treasury shall determine. Stock not held by member banks shall not be entitled to voting power." As member banks increase and decrease their capital and surplus, their holdings of stock in the reserve banks and their liabilities for unpaid subscriptions still subject to call are altered proportionately. These provisions imply, though they do not explicitly state, that a member bank may not later purchase in the market public stock or United States stock either to increase its influence over the reserve bank or as an investment. The par value of each share is placed at one hundred dollars.

Eligibility to Membership.—Not all banks of the country are eligible to membership. All national banks are required to enter and every trust company in the District of Columbia may make application for membership. No special standards of membership are set for these institutions, as the National Bank Act and the laws governing trust companies in the District of Columbia are sufficiently strict. Aside from these two groups, any bank incorporated by special law of any State or organized under the general laws of any State or of the United States may make application. This seems to include all State banks and trust companies and even private banks in those States where there are general laws governing their organization. Provision is made in Section 8 for the conversion of State banks into national banks, the statute which has regulated this in the past being slightly amended.

Eligibility to apply does not mean prompt admission to membership. Every applying bank must, before admission, (1) possess "a paid-up, unimpaired capital sufficient to entitle it to become a national banking association in the

place where it is situated;" (2) comply with the reserve requirements prescribed by the organization committee or by the Federal Reserve Board; (3) conform to the laws "imposed on national banks respecting the limitation of liability which may be incurred by any person, firm or corporation to such banks, the prohibition against making purchases of or loans on stock of such banks, and the withdrawal or impairment of capital, or the payment of unearned dividends, and to such rules and regulations as the Federal Reserve Board may, in pursuance thereof, prescribe;" and (4) "submit to the examination and regulations prescribed by the organization committee or by the Federal Reserve Board."

Amount of Capital.—The significance of these requirements is not perhaps self-evident. The National Bank Act specifies that a national bank organized in a place with a population of 3,000 or less, must have a capital of at least \$25,000; from three thousand to six thousand population, a capital of \$50,000; from six thousand to fifty thousand population, a capital of \$100,000; and with a population of fifty thousand or over, a capital of \$200,000. Banks may be organized in many States with much less than \$25,000 capital, and these banks must increase their capitalization if they are to enter the system.

There will be, however, one or two peculiarities in the application of the new law and in its effects. In earlier years the capital requirements of the national banks were lower than at present. As a result there are a few national banks now in existence whose capital is less than is now required of a new bank located in the same city, because they were organized years ago under the earlier provisions of the National Bank Act. This will probably cause no embarrassment, as State banks entering the system will of course be required to meet the requirements of the later law as it has just been summarized. Another oddity that is worthy of notice is that the Comptroller of the Currency does not require a bank, originally organized with a small capital in a small city, to increase its capitalization to a larger amount with the growth in the city's population. It is thus

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possible that in some cases a State bank may be refused membership, although it has a larger capital than some of the national banks in the same city.

Reserve Requirements for Members.—In Section 19, the Act definitely specifies the amount and location of the reserves for "every subscribing member bank," but states nothing as to the kinds of money that may be used for that purpose. National banks will, of course, be required to comply with the present requirements and may employ only specie and legal tender. Section 9 requires that State banks must comply with the administrative provisions covering reserve requirements, which may be prescribed by the organization committee or by the Federal Reserve Board. The amount of the reserves is, of course, definitely stated, being the same as for national banks; but the kinds of money which may be used by the State banks as a part of their reserve is the important problem to be solved. Since the State banks have in the past used national bank notes, the Federal Reserve Board may see fit to allow this custom to continue, although there is no assurance that it will do so.

Miscellaneous Provisions.—Miscellaneous provisions of the National Bank Act that are referred to under the third group of requirements for eligibility may also be summarized. "The total liabilities of any person, company, corporation or firm to any national bank for money borrowed is limited to one-tenth of the bank's capital and surplus," with the further stipulation that the total of such liabilities shall in no event exceed thirty per cent of the capital stock of the bank and that "the discount of bills of exchange drawn in good faith against actually existing values, and the discount of commercial or business paper actually owned by the person negotiating the same, shall not be considered as money borrowed." A national bank is also forbidden to make loans or discounts on the security of its own capital stock or to purchase the same, except to secure a debt previously contracted in good faith, nor shall it ever declare dividends "to an amount greater than its net profits then on hand, deducting therefrom its losses and

bad debts." All of these restrictions are imposed upon State banks that become members. Since they are provisions usually found in the State laws and are the ones proper for most banks to observe, there is no reason to feel that they involve undue hardships.

Just what additional regulations may be prescribed by the Federal Reserve Board to govern the actions of State bank members, it is impossible to forecast. The new act enumerates Sections 5198, 5200, 5201, 5208, 5209, 5211, 5212 and 5213 of the Revised Statutes as applicable to State bank members. Some of these sections cover provisions already explained and the remainder impose penalties for the taking of unlawful interest, for falsely certifying checks, for embezzlement, abstraction and misapplication of funds, false entries, etc. Reports of the kind now made to the Comptroller of the Currency by the national banks are also required. In short, it may be said that State banks, to be eligible, must meet the most important of the requirements now imposed upon national banks.

In some cases the statutes under which the State banks were organized make it impossible for them to join the system. Thus in New York and in a few other States the banks are not allowed to own the stock of other banking institutions. This would prevent the ownership of the stock of the Federal reserve banks, and apparently the difficulty can be surmounted only by a change in the State law.

The statement in Section 2 of the Act, that the application may be made "within sixty days" (by February 22, 1914), might be interpreted to mean that later applications by State banks would be refused, but the wording in the first paragraph of Section 9 seems to indicate that this is not the case, thus allowing entrance by State banks whenever they see fit to apply. As a national bank may give up its charter and incorporate as a State bank it is thus possible, though perhaps not advisable, for any bank by this method to remain out of the system until there is opportunity to observe its operation.

Stock Subscriptions.—Application having been made

and accepted, the bank must, after thirty days' notice from the organization committee or the Reserve Board, subscribe to the capital stock of the reserve bank in its district to an amount equal to six per cent of its own paid-up capital stock and surplus. The surplus being an especially variable item, occasional new subscriptions or withdrawals and cancellations of stock will occur. If these changes are frequent they may prove to be annoying, even to the extent of discouraging an increase in the surplus. The purpose of the surplus could of course be attained, although in a very unsatisfactory manner, by allowing a growth in undivided profits. It is also to be observed that this will result in a fluctuating capital for each reserve bank, although it will, on the whole, increase with the growth in the capital invested in banking throughout the country.

Time of Payments.—One-sixth of the subscription, or one per cent of the combined capital and surplus of each subscribing bank, must be paid, not at the end of the thirty days of notice, but on call of the organization committee or the Reserve Board. Another one-sixth is due within three months and another one-sixth within six months thereafter. The balance is subject to the call of the Federal Reserve Board.

If a bank has been admitted to membership and paid for its stock, but later is declared insolvent and a receiver is appointed, its stock in the reserve bank is to be cancelled, without impairment of its liability, and all cash payments that have been made with an additional payment of one-half of one per cent per month from the period of the last dividend, are to be applied to the debts of the insolvent bank to the reserve bank. If there is any balance then remaining it shall be paid to the receiver. Any reduction of capital stock by a member bank shall make necessary a reduction in its holdings of stock in the reserve bank, and the repayment to the member bank of that portion of its payment on subscription.

Form of Payments.—Payments are to be in gold or gold certificates, and this promptly raises the question of

the difficulty that may be experienced in securing the money without injury to business. The bill as passed by the House of Representatives specified that payments were to be in cash, but as finally enacted the requirement is gold or gold certificates. "Cash" has a broad meaning and would have made possible the use of specie, legal tender, national bank notes and perhaps even checks and drafts. The final wording is very definite, but still leaves several points open for consideration.

The gold payments for stock subscriptions must be drawn, directly or indirectly, from the cash reserves in the vaults of the banks. On October 21, 1913, the actual amount of cash held by the country banks was almost eight per cent of their deposits, while the law requires them to hold only six per cent. Doubtless this excess was held because needed by the banks, for a reserve agent would have been willing to pay two per cent interest on it. This means that for the initial payments and perhaps for all payments (unless reserve requirements are lowered in time to be of assistance) the country banks may find it necessary to draw upon their accounts with other banks. This seems all the more possible since, beginning with the passage of the Act, the national banks are not allowed to count the redemption fund in Washington as a part of their reserves, and in some cases it may even be necessary to increase the supply of cash in the vaults of the banks. The country banks will not gain by lowering their accounts in reserve cities below the amount they may, until the expiration of three years, count as part of their reserves, but if they draw on any excess above that amount, they will throw the burden of securing the cash on the shoulders of the banks in the reserve and central reserve cities. Since reserve city banks are for the most part in a position to do so, they will probably draw upon the central reserve city banks, thus making the problem one to be met by New York, Chicago, and St. Louis. Inasmuch as Chicago and St. Louis keep considerable sums in New York, that city may feel the strain more than any other. To the extent that the country and reserve

city banks have money loaned direct on call, they may call these loans. But unless the brokers to whom those loans are made cease their operations entirely, they must seek accommodations elsewhere. It is customary for the city banks to act as agents for the out-of-town banks in these transactions, and when the latter call their loans, they are merely taken over by the city banks.

If this method should continue to be followed, the burden will still fall, as under the assumption of the preceding paragraph, upon the banks in the reserve and central reserve cities, especially upon those in New York. The remittance by a given bank will probably be effected by drawing upon its account in the reserve or central reserve city with an order that gold be shipped direct to the reserve bank of its district. Special arrangements must be made to secure gold from the correspondents, as the accounts are payable in silver or greenbacks, as well as in gold. No matter from which group of banks the cash for capital payments may finally be drawn, gold or gold certificates are the form in which remittances must be made. If the bank upon which the burden falls, lacks that particular form of cash, the gold needed must be secured from the United States Treasury. This may readily be done by offering the other forms of money for redemption in gold.

Difficulty in Making Payments.—These references to the possibility of friction in securing gold to make the capital payments are not to be viewed as proof that the burden of making the payments will fall entirely upon the banks in the central reserve cities. So many unknown factors enter into the problem that positive statements on the point can not be made, at least not until after the more careful analysis given in later chapters. The question is raised here in order to indicate that friction in raising the capital is possible and to point out the ways in which such friction may be avoided. The following suggestions are made on the assumption that all of the national banks will enter the system. If any do not, their number will probably be offset by the State banks that enter. As we are seeking to

show only the minimum amount of shifting of funds that may be expected, this assumption seems a fair one.

On October 21, 1913, the national banks of the country had a combined capital and surplus of \$1,785,705,285. Subscriptions to an amount equal to six per cent of this would total \$107,142,317, and as only three per cent is to be paid in, the receipts by the banks on capital payments will be \$53,571,158, with the balance due on call. One-sixth of its subscription must be paid by any bank within any given period. For all of the banks this one-sixth would amount to \$17,857,052. If this sum should be called for at any one time there might be considerable difficulty in making payments without injury to business. It has been suggested that the lowered reserve requirements will release the necessary cash and that at once after making payment the member bank may receive its cash back again by rediscounting. However, the new reserve requirements are not operative in any district until the Secretary of the Treasury shall have officially announced the establishment of the Federal reserve bank in that district. It is specifically provided that a reserve bank may not transact any business except that which is necessarily preliminary to its organization until it has received authorization from the Comptroller. Unless a reserve bank may be considered to be "established" before its capital, or a part of it, has been paid in, the lowered reserve requirements will give no relief. And unless the Comptroller authorizes the transaction of business before the capital has been paid in, subscribing banks may not secure a prompt return of their funds by rediscounting. How some of these matters will be interpreted can not be foreseen, but in any event it will be important to accomplish the payments without needless friction. Several of the provisions of the Act are of assistance and will doubtless be utilized.

Ways of Avoiding Friction.—It is to be noticed that the first payment is due not on any fixed date, but that within thirty days after notice from the organization committee every national bank is required to subscribe, and the

first installment is "payable on call of the Organization Committee of the Federal Reserve Board." These calls need not be issued to all the banks at the same time, but may be distributed over as long a period as may be desirable and may from time to time be distributed with discretion in different sections of the country.

A second advantage is the fact that it will be possible to set some of the reserve banks in operation earlier than others. All of the districts must be decided upon before the exact boundaries of any of them can be determined, but it is entirely possible to organize one or even several promptly and begin to operate them before requiring all of the capital payments from the others. Here also discretion may be employed and the dates for beginning operations may be judiciously scattered.

A third source of relief is the fact that the subscribing banks are not required to make payment on any set days but merely within certain periods after the first call. Thus the bank may, within limits, consider its own convenience as to the date of payment.

A fourth and very important aid will doubtless be found in the power of the Secretary of the Treasury to deposit government money where it will be of assistance. After the new system is organized he may deposit the general fund of the Treasury, with the exception of the redemption fund, with the reserve banks or with member banks; and prior to that time he may, of course, continue his present designation of national banks as depositories. With perhaps \$150,000,000 at his disposal to deposit as he sees fit, he may, and doubtless will be, of tremendous assistance in tiding over any difficulties that may arise. In fact it would probably be entirely safe to say that the four sources of relief combined are so important that there need be no fear whatsoever of any monetary stringency in meeting the payments on subscriptions. The requirement that the payments must be in gold is a very valuable one, in that a considerable supply of it will thus be furnished to the reserve banks at the very start.

CHAPTER V

FEDERAL RESERVE BANKS

Organization of Reserve Banks.—In a previous chapter we have described the work of the organization committee down to the point where any five applying banks in a given district are designated to execute a certificate, and that document is filed and recorded at the Comptroller's office in Washington. This brings into existence the reserve bank as a corporate body. The powers conferred upon it by the terms of the Act are to be found in Section 4 and are the usual general corporate powers, with the exception of the eighth in the list, which will be later considered. Each reserve bank is "to have succession for a period of twenty years unless it is sooner dissolved by an Act of Congress, or unless its franchise becomes forfeited by some violation of law."

Classification of Directors.—After the certificate of organization has been filed, the next step is to choose the board of directors. Each reserve bank is to have nine directors, each holding office for three years, and divided into the three classes, A, B, and C, there being three in each class. The members of Class C are to be appointed by the Federal Reserve Board. All must have been for at least two years residents of the district for which they are appointed, and none of them shall be an officer, director, employee or stockholder of any bank. One of this class, who must be a "person of tested banking experience," is to be designated as chairman of the board of directors of the reserve bank and also shall be known as "Federal reserve agent." In the latter capacity he shall, under regulations of the Reserve Board, maintain a local office of that Board and act as its official local representative. Pending his appointment the organization committee shall perform his duties. Another member of Class C shall also be of tested banking experience,

and shall be designated as deputy chairman and deputy Federal reserve agent to act in the absence or disability of his principal.

How Directors are to be Chosen.—Directors of Classes A and B are to be chosen by the member banks. Directors of Class A are to represent the member banks, while those of Class B shall, at the time of their election, be "actively engaged in their district in commerce, agriculture, or some other industrial pursuit," and may not, while directors of the reserve bank, be officers, directors or employees of any other bank. "No Senator or Representative in Congress shall be a member of the Federal Reserve Board or an officer or a director of a Federal reserve bank."

In each district the chairman of the board of directors of the reserve bank (also known as the "Federal reserve agent") or, pending his appointment, the organization committee, shall classify the member banks of the district into three groups, each group containing, as nearly as possible, one-third of the total number and consisting of banks of similar capitalization. Each group shall be designated by number.

Balloting for Directors.—At a regularly called meeting of its board of directors each member bank shall elect by ballot a "district reserve elector" and shall certify his name to the reserve agent. These electors may be chosen from any source since there are no limitations in the Act, and so will probably be officers and directors of the various member banks. The reserve agent will make lists of the electors thus chosen by all the banks in the three groups of the district, and transmit one list to each elector in each group. Each member bank may nominate a candidate for Class A and another for Class B of the board of directors of the reserve bank, a list of these nominees being furnished to each elector within fifteen days after its completion. Within fifteen days after the receipt of this list of nominees, every elector shall certify to the reserve agent his first, second and third choices for directors of Class A and Class B, respectively, on a ballot form

furnished by the reserve agent. No more than one vote may be cast by an elector for any one candidate. Each elector will thus name six men, three in each class.

Any candidate with a majority of the total votes cast in the column of first choice shall be declared elected. If there is not found to be a majority for any one candidate, the votes for such candidates found in the column of second choice shall be added to those in the first column. If there is still no majority the votes in the third column also shall be included. Presumably a majority will by this time be secured. There is no further provision for breaking a deadlock in the voting, but it seems probable that a new election could be ordered by the reserve agent if there should be a tie throughout. However, this result is so improbable that it will doubtless never arise.

Determining the Rotation of Directors.—At the first meeting of the full board of directors of the reserve bank, the directors of each of the three classes shall decide upon the term of office of each of their own number. One of each class will retire in one year, one in two years, and one in three years from the first of January nearest to the date of such meeting. Thereafter each new director shall be chosen for three years. Vacancies at any time in any one of the three classes are to be filled in the same manner as in the original selection, such appointees to hold office for the unexpired term of their predecessors. Compensation to the directors may be provided by the reserve banks, the amount to be subject to the approval of the Reserve Board. An exception to this rule is the Reserve agent whose compensation, paid monthly by the reserve bank, is to be determined by the Reserve Board. A reasonable allowance also is to be made for all necessary expenses of directors in attending board meetings. All salaries and expenses of directors are to be paid by the respective reserve banks.

Directorate Divided into Two Groups.—The board of directors of the reserve bank as thus chosen, while nominally divided into three classes, is actually made up of two groups. Class C represents the Federal Reserve Board,

while Classes A and B represent the banks. Class A presumably will be composed of officers or directors of member banks, since they are not debarred. Members of Class B may not be officers, directors, or employees of any bank, but must at the time of their election "be actively engaged in their district in commerce, agriculture or some other industrial pursuit." If connected with any bank at the time of their election they must resign their positions, but since they are chosen by the banks and may in the past have been officers, directors or employees, it is evident that they will represent the interests of the banks that have chosen them. Since also at least two of Class C must be men of "tested banking experience," it is apparent that the majority of the directorate of each reserve bank will be composed of men who have a knowledge of banking practice or will be subject to the instructions of those who do have such knowledge.

Majority of Directors Will Be Experienced Bankers.
—The fact that a majority of the directors of each reserve bank will be men experienced in banking needs emphasis. Members of Class A will doubtless continue to be active as directors and officials of their own banks. As such they will be in constant touch with the problems upon which they will need to pass in their capacity as reserve bank directors. Members of Class B, although not officially connected with any bank, will be thoroughly familiar with the different lines of business in their own communities. It is because of this general knowledge of business and commercial conditions that their services on directorates are so greatly in demand. The duties of the practical banker consist largely of passing upon the quality of the promissory notes and other loans placed before him. In such work the bank's officers need and secure the aid of business men of the community who make up the bank's directorate. A bank official counts upon each director to furnish the information as to conditions in some line of business.

It is men of this type that are to serve in Class B. During their period of service they may not be officers, direc-

tors, and employees of any bank, but they may be stockholders. They stand midway between Class C, who are appointed by the government and presumably represent the people, and Class A, which is made up of the bankers themselves. In practice, since they are chosen by the bankers, they will doubtless reflect the views of the bankers and vote with them on questions about which there is a difference of opinion. As two out of the three members of Class C are to be of "tested banking experience," the nine members of the directorate of each reserve bank may include eight who are experienced in banking. This will be a source of satisfaction to those who may have feared that the management of these banks might be placed in the hands of inexperienced political appointees. On the other hand, it will be a cause of concern to those who contend that the management of these institutions should not be entrusted to those who have a personal interest in their operation.

Should the Bankers Control the Board?—The difference of opinion on this point suggests a question of much more importance. Has the law been so framed that the technical business of banking is placed in the hands of men experienced in that field and at the same time so limited their power that they will be unable to endanger the interests of the public? The first half of this question has already been answered. The directors of the reserve banks are to be experienced bankers. Routine work, upon which the actual success of the new institutions will largely depend, will be in the hands of experts in that field. Upon their shoulders has been placed the responsibility for sane, conservative management.

We are not yet ready to answer the second half of the question. There must come first an explanation of the resources and operations of the reserve banks and an analysis of the personnel, powers and duties of the Federal Reserve Board.

Balance of Power Between Large and Small Banks.—Another important consideration is that of the balance of power between the large and the small banks. As a people,

we have feared concentration of power among the large banks and heard much of the evil influence of interlocking directorates and of the "Money Trust." It is obvious that under the new arrangement there will be a tendency to break down the old system under which a large part of the funds of the country drifted to the large centers, especially to New York. Instead we shall have perhaps twelve centers, each largely separated from the rest. Within each of these districts, however, it may still be possible for the larger member institutions to maintain control. An attempt has been made to prevent this by dividing the banks within each district into three groups of equal size for the purpose of voting on the choice of directors, each group made up as far as possible of banks of like capitalization. This machinery is apparently provided with the intent of making possible the choice of representatives from each of the groups—the large banks, the small banks and those of intermediate capitalization. How successfully it might work if the Act were entirely clear is uncertain, but it requires great faith in the efficacy of such devices to prevent domination by the more powerful interests involved, to induce the belief that the larger institutions will not in fact determine the outcome of each election. Unfortunately, however, the plan may not receive a fair trial, for although the provision for the grouping is sufficiently clear, the plan for casting the ballots and for counting the votes makes no provisions for recognizing the groups. It is possible that rulings may be made later by the Federal Reserve Board that will abundantly cover the point. Unless this is done, the principle introduced in one place may be nullified through the failure to observe it elsewhere.

Necessity for Branches.—With eight, ten, or, at the most, twelve districts, a reserve bank will not be able to handle conveniently all the business of its district from a single office. The area of the continental United States, excluding Alaska, is 2,383,006 square miles, or an average of 198,583 square miles for each of twelve districts. The

prompt transaction of business between the reserve banks and their members will be facilitated by the establishment of branches. These are provided for in Section 3. Each reserve bank is directed to establish branches within its district and permitted to establish them in the district of any other reserve bank which may have been suspended. Each branch is to have its own board of seven directors, who shall operate the branch under rules and regulations approved by the Reserve Board. Their qualifications are to be the same as those of the directors of the reserve banks. Four are to be chosen by the reserve bank and three by the Reserve Board and each may hold office during the pleasure of the body that appointed him. The reserve bank shall designate one of the directors as the manager.

Importance of Branches.—These branches are of very great importance. The extent to which they may be used is dependent upon the will of the parent reserve bank of which each is a branch, and which will draw up the regulations under which it will operate, and upon the Reserve Board by whom those regulations must be approved. Just how much authority and responsibility may be placed upon them is a matter for conjecture, but the practice in other countries suggests the possibilities here. The Bank of England has eleven branches, and the Bank of France has one hundred and twenty-eight head branches, seventy-two auxiliary bureaux and three hundred and twelve agencies. The Reichsbank of Germany has nearly five hundred, of which twenty are head offices and the balance sub-branches and agencies; the functions of the head branches are the same as those of the parent institution, while the work of the sub-branches and agencies is limited to the collection of bills, the receipt of deposits, etc., all discounts being referred to the nearest head branch. In Canada the branches of the large banks are very numerous, but the entire Canadian system is so different from our new one as to make any comparisons of little value.

Branches Will Prevent Unfair Advantages to City Containing Main Office.—Probably a considerable amount

of the rivalry among the various cities of the country has been due to a failure to realize that numerous branches may be established and that each of these branches will have its own directors and perhaps transact the same kinds of business as the head office. Communication with a distant bank, when ordinary accommodations are needed, will, in most cases, be entirely unnecessary. With numerous branches there need be no long delays in securing rediscounts and obtaining notes.

Resources of Reserve Banks.—Having described the organization of the reserve banks and their branches, let us next analyze the nature and extent of their resources. In general, the resources originate in three ways—payments on capital stock, deposits by member banks and deposits by the government. The exact amount of each of these can not be determined with accuracy. We do not yet know the number of reserve banks and how much capital will be subscribed to each; hence it is impossible to tell how much will be paid into each from these sources. The reserve banks are to hold a part of the required reserves of the member banks, but the amount which each will hold can not be determined even approximately until we know their number. Since the Secretary of the Treasury may leave government moneys in the Treasury of the United States or place them in reserve banks or member banks at his discretion, it is hard to calculate the amount of resources available from this direction. Since, moreover, he may distribute them among the reserve banks in such proportions as he sees fit, the problem is still more complicated.

If we proceed, however, on our previous assumption that all of the national banks and none of the State banks will enter, assume also that the Secretary of the Treasury will distribute all of the public funds equally among the reserve banks, and finally infer that the maximum number—twelve—will be established, what would be their average strength? Without presenting in detail at this point the method by which the extent of each class of resources of the reserve banks can be estimated, it may be stated that the total

cash resources of the entire number of regional banks will probably be between \$420,000,000 and \$672,000,000. This would give to each of twelve an average of from \$35,000,000 to \$56,000,000.

Necessity for Careful Districting.—In an earlier chapter reference has been made to the difficulty of determining the boundaries of the districts. This calculation pictures very clearly one phase of the problem. If all of the national banks and only the national banks enter, the total paid-in capital of all of the reserve banks will be only \$53,571,158.57 and their total cash resources no more than about \$672,000,000. The average capital of each would thus be \$4,464,263.21 and the average cash resources about \$56,000,000. This paid-in capital of \$4,464,263.21 implies, of course, a subscribed capital of twice that sum, or \$8,928,526.42 for each. In order to secure at least this amount for each district care must be exercised not to enlarge one at the expense of the rest, unless the public are to be asked to supplement bank subscriptions in some sections of the country. Yet if some of the districts—for example, that in which New York City is located—are very small in area, the reserve banks of those districts will be far smaller in capital and aggregate resources than many of the member banks.

The national banks of a district including only New York State would contribute a paid-in capital of \$10,326,506.50, or nearly one-fifth of the amount that can be secured from the entire country. If the area of the district be restricted to New York City (not including Brooklyn), the paid-in capital of the reserve bank would amount to \$7,479,150, or about one-seventh of the total amount available. Compared with the \$50,000,000 capital and surplus of the National City Bank, which will be a member bank, or the capital and surplus of \$25,000,000 of the First National, the \$17,000,000 of the Hanover National and the \$10,000,000 of the Chase National of New York, the stockholders' contributions to the regional banks appear pathetically inadequate.

Possibility of Failure of a Reserve Bank.—We can not

avoid considering the possibility of the failure of a member bank larger than the reserve bank of its district. It is not difficult to see that the failure of such a large institution as the National City Bank of New York, whose resources are \$293,171,812.46, would place the reserve bank of the New York district under a very heavy strain. The seriousness of this is relieved by two considerations. One is the reminder that the Bank of England with a capital and rest (surplus) of £17,776,461 (\$88,882,305) and total resources in both issue and banking departments on December 13, 1913, of £115,981,198 (\$579,905,990) is not much larger than a number of the joint-stock banks of Great Britain. Thus Lloyd's Bank has total resources of £104,830,193 (\$524,150,965) and the London County and Westminster Bank has resources of £100,434,316 (\$502,171,580).

A second consideration is the fact that each reserve bank has resources, from which it may secure help, that is not available to its member banks. Its right to secure Federal reserve notes and the power of the Federal Reserve Board to compel other reserve banks to rediscount for it are among the most important. Moreover, as time passes each reserve bank, if the system is a success, may materially strengthen its position by the accumulation of a surplus.

Summary of Powers of Reserve Banks.—The reserve banks are organized with the hope that they will perform certain very important functions. Upon their work depends the success or failure of the entire system. To the extent that they, under the direction of the Federal Reserve Board, are able "to furnish an elastic currency, and to afford means of rediscounting commercial paper," the improvements hoped for by Congress will be secured. This leads us from our survey of their resources to a discussion of their powers and their method of operation. What is said on this topic applies both to the banks and to their branches, the latter exercising the functions that may be allowed them under the rules and regulations set forth by the reserve banks and approved by the Federal Reserve Board. Only a brief sum-

mary need be given at this time, as each must be treated in detail in later chapters.

Member banks must deposit a specified portion of their reserves with the reserve banks. This is necessary in order to secure a secondary bank reserve that is liquid. At present, reserves of this sort are created by each bank accumulating a reserve account with one or more banks in the large cities, approved by the Comptroller of the Currency for this purpose, these approved banks being known as reserve agents. Competition among reserve agents has resulted in the offer of interest for these reserve accounts, two per cent being the rate usually paid.

Will the Reserve Banks Pay Interest upon Deposits?
—Federal reserve banks are not forbidden by the Act to pay interest on deposits of member banks, but it does not seem at all certain that they will do so. Within any district there can be no competition for the deposit of required reserves. All such reserves must be deposited by a member bank in the reserve bank of that district. It also seems probable, for reasons given elsewhere, that the reserve banks will have no motive to compete with other institutions to secure deposits from members in excess of the amounts required for reserve purposes since they will ordinarily not be troubled by a lack of funds. It may be that some members will keep extra amounts with them for exchange purposes, but that will doubtless be due to their own self-interest and not because the accounts are definitely solicited by the reserve banks.

If there is any doubt of the ability of a reserve bank to pay regularly the cumulative six per cent dividend to the banks owning the stock, there would certainly be no reason why member banks should desire the interest payments, as they would thus be adding to the operating expenses of the bank and lowering their own dividend returns. In the absence of any prohibition against the payment of interest on deposits and in view of the fact that the reserve banks may be successfully operated, pressure may be exerted to secure it. This brings us back to the fact previously empha-

sized that the management of the reserve banks is in the hands of the bankers themselves. Their representatives constitute a majority of the membership of the board of directors and, if they so decide, interest may be paid upon these deposits. The great central banks of Europe do not, however, pay interest.

Will Government Deposits Draw Interest?—Deposits may be made by other reserve banks, but only for exchange purposes. Since these accounts will be very active the question of interest will doubtless not arise, but the question of deposits by the United States is very different. Under the Act of May 30, 1908, "all national banking associations designated as regular depositaries of public money shall pay upon all special and additional deposits made by the Secretary of the Treasury in such depositaries, and all such associations designated as temporary depositaries of public money shall pay upon all sums of public money deposited in such associations interest at such rate as the Secretary of the Treasury may prescribe, not less, however, than one per centum per annum upon the average monthly amount of such deposits."

This requirement is not altered by the new A-t. In the future the Secretary of the Treasury may use his discretion in depositing United States money with reserve banks or member banks. Since member banks will still be required to pay interest, they will certainly be tempted to leave the funds with them unless the reserve banks offer similar inducements. Again we may observe that European practice, with one or two minor exceptions, is against doing this. Our situation will be different in one very important particular. After the payment of six per cent cumulative dividends, all net earnings, with certain deductions, are to be paid to the United States. The payments to the government thus provided for, may be considered sufficient reason for not requiring the payment of interest on United States deposits.

Rediscounting.—An important feature of the work of the reserve banks is rediscounting. Banks needing cash

may take such of their assets as are in the form of commercial paper of the sorts specified by the Act as available for the purpose, and offering this for discount, obtain funds from the reserve banks. These funds secured by the process of rediscounting may be either in the form of a checking account with the reserve bank, or in cash. The account may be merely the reserve account which the member bank is required to maintain, or it may be such excess above that sum as it may desire for exchange purposes. If cash is secured, it may be secured in one of several forms; the reserve bank may choose to deliver specie, greenbacks, national bank notes, the reserve bank's bond-secured notes or Federal reserve notes. Since some of these are not available for use as reserves by member banks, especially the national banks, the bank securing them may promptly present them for redemption either at the counter of the reserve bank itself or at the United States Treasury. The extent to which rediscounting will be practiced and Federal reserve notes issued is largely a matter for speculation and can not be predicted with any approach to accuracy. It will be dependent, however, upon the favor with which American bankers view the practice, the extent of their need for such assistance, the amount of paper of the acceptable sort which they may have in their portfolios when the need arises, and finally the promptness and ease with which this aid can be rendered.

Banks Must Treat Members Fairly and Impartially.—Before leaving the question of rediscounting, attention should be called to the wording of a paragraph of Section 4, which declares that the board of directors of a reserve bank shall "administer the affairs of said bank fairly and impartially and without discrimination in favor of or against any member bank or banks and shall, subject to the provisions of law and the orders of the Federal Reserve Board, extend to each member bank such discounts, advancements and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks."

This statement was introduced because of the fear expressed by many witnesses before the Senate Committee on Banking and Currency, that the reserve banks might be tempted to discriminate in granting accommodations. One witness, Prof. O. M. W. Sprague of Harvard University, held that such power was of great importance to the reserve banks since it would give them the ability to force member banks to adopt sound banking methods under the penalty of not being accommodated in time of need. Others contended that there was greater reason to fear that this power would be used unfairly, and pointed to alleged cases of discrimination by clearing house associations in the panic of 1907 and at other times. The net outcome of the discussion was the insertion of the provision just quoted.

Power to Issue Notes.—Power to issue notes is closely connected with the right to rediscount, and calls for only brief treatment at this place. Probably little gold or lawful money will be voluntarily paid out by the reserve banks. Self-interest will prompt a policy under which they will pay out forms of money which they may not count as part of their own reserves. National bank notes come first, but they may be presented at Washington for redemption in lawful money and this lawful money may be placed in reserves, so national bank notes may not be paid out over the counter to any considerable extent. The bond-secured notes of other reserve banks will, of necessity, be forwarded for redemption. Each reserve bank, however, will eventually have its own bond-secured circulation, and, as is the case at present with the national banks, will be eager to keep these notes at work. Money is invested in the bonds, and the greatest profit can be secured on the investment only by keeping the notes in circulation. Hence they will be pushed out as rapidly as possible. It appears clear, therefore, that Federal reserve notes will be the form of money to be most freely handed out. The reserve bank issuing reserve notes, however, must pay interest for them at a rate to be established by the Federal Reserve Board, a fact which may discourage their issue and hurry their prompt retirement.

Provision was made in preliminary drafts of the bill for the rediscounting by reserve banks of the direct obligations of their members, but this right is not included in the Act as passed. Borrowing by this method has been very common among banks and could be accomplished more easily and more quickly than by rediscounting.

Open Market Operations.—"Open market operations" is the expression used to describe the other kinds of business to be performed by the reserve banks. The purposes of these operations are (1) to furnish lines of investment for the funds of the reserve banks when not employed in the sort of work already described, and (2) to make possible a general control of market conditions by the reserve banks. Discussion of these operations must be confined to a special chapter on the subject.

Profits of Reserve Banks.—Just how profitable the reserve banks will be it is impossible to determine. Comparisons with present banking institutions in the United States are futile because there are so few points of similarity. They will differ in so many ways from the central banks of Europe, especially in their inability to compete with the other banks of the country, that no inferences may be drawn from foreign experiences. Any earnings "after all necessary expenses of a Federal reserve bank have been paid or provided for" are to be devoted to the payment of an annual six per cent cumulative dividend. Net earnings above this amount are to "be paid to the United States as a franchise tax, except that one-half of such net earnings shall be paid into a surplus fund until it shall amount to forty per cent of the paid-in capital stock of such bank." The accumulation of a surplus is in line with the requirement that national banks must, in a similar manner, set aside a part of their net earnings until a twenty per cent surplus has been acquired. That a larger percentage of surplus should be required of the reserve banks is wise because of their greater importance and responsibility.

The Franchise Tax.—How large the receipts of the United States from the franchise tax may be it is impossible

to conjecture. Whatever its size, it is to be used, in the discretion of the Secretary of the Treasury, either (1) to supplement the gold reserve held against outstanding United States notes, or (2) to reduce the outstanding bonded indebtedness of the United States under regulations to be prescribed by the Secretary of the Treasury. Which alternative is used will depend in part upon the personal opinions of the Secretary and in part upon the market conditions for United States bonds. If used to strengthen the gold reserve against United States notes they may ultimately be protected by a one hundred per cent reserve and be merely gold certificates. This may pave the way to their entire elimination from our monetary system. On the other hand, a Secretary less impressed with the alleged dangers of inflation, but greatly troubled over the existence of a large national debt, may buy in the outstanding United States bonds. If these bonds should fall in price this would be desirable, both because the bonds could be purchased cheaply and because of the importance of supporting the market for the sake of the government's credit. Here, as elsewhere, in the Act, very broad powers are conferred upon the Secretary of the Treasury.

Provision for Dissolution of Reserve Bank.—If a reserve bank should be dissolved or go into liquidation, any surplus remaining after the payment of all debts, dividend requirements and the par value of the stock, shall be paid to and become the property of the United States and used like the franchise tax. The success of the reserve banks depends upon the cordial coöperation of the member banks, the ability of the Federal Reserve Board and the discretion of the Secretary of the Treasury. With so many unknown factors, predictions are useless. If the failure of a reserve bank should occur, the district in which that bank is located would not be without aid, for at once the reserve bank of one or more of the other districts may establish branches there. Thus there need be no permanent inconvenience because of a lack of banking accommodations.

CHAPTER VI

THE PROBLEM OF CONTROL OF THE NEW SYSTEM

Coöperation in Europe.—Each of the reserve banks that has just been described is a sort of central bank within its own district. The situation is not entirely unlike that existing in Europe where each central institution is especially concerned with the problems and needs of its own country, but where there is, nevertheless, a considerable amount of coöperation between these banks when necessary. In 1890, when the great firm of Baring Brothers failed in London, the Bank of France came to the rescue of the Bank of England with a large amount of gold. Aid was also given by the Russian Imperial Bank, and with this outside assistance England successfully met the crisis. In 1907 the panic in the United States threatened disaster in Europe. We turned to England for help, and our difficulties might have meant trouble for the Bank of England had not the Bank of France again given aid. Self-interest, if nothing else, compels these institutions to assist each other. The downfall of any one of them would be a calamity that would involve the entire world, just as the failure of any large bank in one of our cities might mean the failure of many others.

Valuable as this help may be, it is not always given willingly. Commercial, political and financial rivalry make complete harmony of action an impossibility, and aid is often withheld until serious trouble has developed and heavy losses have been incurred. This was the case in 1907, when relief reached us only after we had suffered severely. To a less extent it was true in November, 1913, when we lost \$14,000,000 in gold to Canada, and yet could not import gold from London in spite of our heavy balances there. The only shipment of gold that was engaged during the fall caused an immediate rise in discount rates in London and

resulted in the prompt resale of a part of the gold. All further efforts were discouraged by the fear that a rise in discount rates abroad might depress the foreign market for our securities, perhaps to such an extent that a large volume of them would be forced back upon us. This would have driven down their prices in our markets, made the issue of new securities here difficult, if not impossible, and in this way would have seriously hampered our growth and development.

Our Free Gold Market.—Concerted action among our banks in such a situation was difficult. Within the United States the condition of the banks has been far from satisfactory. The reports to the Comptroller of the Currency showed a large percentage of violations of the reserve requirements, and the weekly statements of the New York Clearing House banks showed a surplus reserve that was low, and which finally became a deficit. Interest rates rose, especially on call loans, and the loans and discounts of the banks were sharply contracted. Yet under our system there was no way to prevent withdrawals of gold. We had exported merchandise heavily throughout the fall months and large balances were due us from London, but Canada used her large deposit account with the New York banks in a way that intensified our difficulties. Exporting both to us and to England, she added to her own foreign credit balances upon which she had a right to draw. In addition, she arranged with London bankers for the underwriting of several large security issues. Instead of drawing directly upon these large foreign accounts to get cash for her local needs, she followed her usual practice of financing the transaction through New York. The details have not been made public, but it seems probable that she sold sterling exchange in New York and then drew the gold she needed from the New York banks.

New York, for the reasons already given, was very reluctant to import gold from London, and was thus in a helpless position. Conditions in various parts of the world contributed to make the difficulty more serious. Bank failures in

India, difficulties in Paris in connection with the financing of the Balkan War and the impending 1,300,000,000 franc government loan, disturbances in Mexico and rumors of over-expansion in Brazil, Russia and elsewhere, added to the precariousness of the situation. Withdrawals from London were inadvisable, if not impossible, yet we could not check the drain to Canada.

The Need for Control.—This incident is merely one of the most recent of an almost countless number that could be recited, all showing the need for international assistance and coöperation, but also indicating clearly the helpless condition of the United States. One country will aid another, but only if such aid can be given without intensifying the local strain, or if a refusal to grant assistance would react harmfully. Control is exercised differently in the various countries, but in every instance it resolves itself into the ability of some central institution to set in operation forces that accomplish the end desired. Centralization of control makes possible a continuity of policy, a supervision of internal financing, and, when necessary, the exercise of force to accomplish the purposes desired.

In the United States this is lacking. Cash and credits are concentrated to a considerable extent, so much so, in fact, as to give rise to the charge that a "Money Trust" exists. But no matter how true the charges of a control of credit may be, unanimity of action among the banks through interlocking directorates and otherwise is not sufficiently complete to handle the difficulties just described. The new regional system is intended to meet this. Each reserve bank will be in close touch with business in its own district. Each will adjust its discount rates to meet the local need, will issue notes as they are demanded by commercial conditions, and will continually guard against inflation. If trouble starts in any district it will reach the other districts of the country only through the reserve banks. In other words, the country is, figuratively speaking, divided into compartments that are expected to be almost watertight. Disaster in one is to be shut off from the rest.

Yet this very isolation might be carried too far. Even in ordinary times one section of the country may need the aid of another, while in time of stress such aid must be secured in order to prevent a disaster like that of 1907. In Europe, assistance is voluntarily given by one country to another and largely as a matter of self-interest. We are to try another plan in the hope that it will be still better, believing that within a single country each part should not only be willing to help the rest, but if the need is great, should be compelled to do so.

The Federal Reserve Board.—Our new law creates a body to be known as the Federal Reserve Board, a body of seven men, with very broad powers of supervision and control. The Secretary of the Treasury and the Comptroller of the Currency are to be members *ex officio*, and the other five are to be appointed by the President of the United States, by and with the advice and consent of the Senate. Only one of the appointive members may be selected from any one district, and the President in his appointments must "have due regard to a fair representation of the different commercial, industrial, and geographical divisions of the country," a restriction that is difficult to interpret accurately, but which at least would seem to prevent the choice of two men from the same city.

The five appointive members of the Reserve Board are to hold office for ten years, unless sooner removed for cause by the President, the first appointees being chosen for two, four, six, eight and ten years respectively. All of them, as well as "the Secretary of the Treasury, the Assistant Secretaries of the Treasury and the Comptroller of the Currency, shall be ineligible during the time they are in office and for two years thereafter to hold any office, position or employment in any member bank." Two of the appointive members must be experienced in banking or finance. One of these two is to be designated as governor and one as vice-governor of the Reserve Board, the governor being the active executive officer. The Secretary of the Treasury shall be *ex officio* chairman of the board. Each of the five appointive

members must give his entire time to the duties of his office. It is possible to change the majority of the board in a presidential term. The ex officio members are removable, while the term of one other expires every other year. Any president can thus name four out of seven members.

Too much stress can not well be placed upon the importance of these positions. The enumeration later of their powers and duties will make this entirely clear; but enough has already been said to justify the statement that this body of men will be fully as important a group as the Interstate Commerce Commission, and will rank next in power to the Supreme Court of the United States. That this will be recognized by the President and the Senate there is no doubt. That the honor and importance of the positions will attract men of ability, regardless of the salary attached, seems equally certain; and in these considerations lies the answer to the fear that the men chosen may be merely political appointees, picked for services rendered to their party. The choice of the two who are members ex officio will probably continue to be determined by the considerations that prevail in the selection of a Cabinet officer and the head of a government bureau. Of the five who are appointed, the terms of two normally expire during a single four-year administration. These two, with the Secretary of the Treasury and the Comptroller of the Currency, will constitute a majority of the Board and could control its activities. It is thus conceivable that other than the highest motives might result in the abuse of this appointive power. The safeguard is in the good judgment and integrity of the President, of the Senate and of the appointees themselves.

Qualifications for Membership.—There is nothing to prevent the appointment of one or more bankers to this board, provided that they resign their positions as officers or employees of member banks before entering upon their new duties, and are willing to refrain from holding such offices for at least two years after their term of service on the Reserve Board has expired. This is specifically indicated in Paragraph 2 of Section 10, and another paragraph

of the same section adds that "no member of the Federal Reserve Board shall be an officer or director of any bank, banking institution, trust company or Federal reserve bank nor hold stock in any bank, banking institution, or trust company; and before entering upon his duties as a member of the Federal Reserve Board he shall certify under oath to the Secretary of the Treasury that he has complied with this requirement." Whenever a vacancy occurs among the five appointed members, other than by the expiration of the term of the incumbent, the place shall be filled in the same manner as the original appointment, the appointee to hold office for the unexpired term of the member whose place he is selected to fill. The President of the United States may fill such vacancies during a recess of the Senate by granting commissions which shall expire thirty days after the next session of the Senate convenes.

The Reserve Board and the Banks.—It is very evidently the intention of Congress that the membership of the Reserve Board be divorced as fully as possible from control by the banks. Not only must they not be bankers while holding office, but they must not become bank officials for at least two years after their terms on the board have expired. In the past, officials of the United States Treasury Department have at times resigned to accept important executive positions with large banks. Under the circumstances remarkably few accusations have been made that these government officials have, while in office, been influenced in their actions by the prospects of later remunerative employment. In the future, however, such contingencies are to be carefully avoided. Officers, directors and employees of banks, whether members or non-members, must resign such positions if appointed to the Reserve Board and stockholders must dispose of their holdings. Some of the decisions that must be made by the board may vitally affect the earnings of the banks of the country, even though they may not belong to the new system. No one with a personal interest in the banks could perform his duties on the board without prejudice. The presence of a railway official on

the Interstate Commerce Commission would be objectionable because he would be compelled to decide problems in whose solution he has a personal or official interest. It would be an obvious impropriety for a Justice of the Supreme Court to plead on either side of a case brought before that tribunal for decision. For similar reasons the presence of a banker on the Federal Reserve Board is objectionable. That body must often make decisions that may not be of aid to the bankers, although for the best interests of the country.

Foreign Practice.—Unless the apparently very strict language of the Act is modified in practice or by the courts, its requirements are more stringent than either the law or the practice in other countries. In Germany there are no legal restrictions as to membership on the Board of Directors of the Reichsbank, and in practice the directors are bankers, merchants, landlords and manufacturers. Of the eighteen members of the General Council of the Bank of France, there are restrictions placed on the choice of only eleven. There is no legal restriction as to the class from which the directors of the Bank of England may be selected except that they must be “natural born subjects of England or naturalized,” but in actual practice the selection is “confined to those who are, or have been, members of mercantile or financial houses, excluding bankers, brokers, bill discounters or directors of other banks operating in the United Kingdom.”

The practice of limiting selections for the directorate of the Bank of England to men not engaged in banking is often mentioned as one that we should copy. The mercantile and financial houses from which its directors are chosen correspond somewhat roughly to the private banks of the United States. They deal in securities and act as guarantors of paper. The bankers who are excluded are those connected with the joint stock banks which do the larger part of the ordinary commercial banking business of Great Britain. Although there is no law preventing it, the fact that the Bank of England must exercise a large measure of control

over their business and that it actively competes with them in the market, has created a sentiment against their choice.

The Situation in the United States not Identical.—Our new legislation contains more safeguards than either the law or the practice abroad, but one or two points of difference must be noted. The powers and duties of the Federal Reserve Board are by no means analogous to those of the directors of the Bank of England. The latter are responsible for the conduct of an ordinary bank. They must scrutinize paper, pass upon the granting of loans to particular individuals and attend to the other multitudinous matters that are a part of daily banking routine. The Bank of England is an institution dealing daily with the general public, and its directors are the officials upon whom responsibility for the successful conduct of this banking routine must rest. The development of the English system has, in addition, placed upon them a great many other duties. As we have already indicated, they are expected by the other bankers and by the public to safeguard the financial interests of the country by a careful oversight of the conduct of the other banks.

Under our new law the duties we have described are to be divided. The routine work of scrutinizing paper and passing upon individual credit is assigned to the nine directors of each reserve bank. One-third of them are to be bankers, another one-third, while not bankers, are to be chosen by the bankers and will doubtless be familiar with banking matters, even though not actively engaged in that business at the time of their choice. The other three directors are to be selected by the Federal Reserve Board, but two of them must be men of tested banking experience. It is to be expected, of course, that the officers of each reserve bank will be practical bankers. To the Reserve Board are assigned the powers and duties of supervision. On that board must be men who understand and are sympathetic with banking problems. Some of them should have been bankers in the past, but none of them should remain such while members of the Reserve Board.

After all, as is urged elsewhere in this volume, the successful operation of this new law will be dependent upon two factors. The more important of the two is the customs and habits of the general community as reflected in public opinion and sentiment. Such forces are of slow growth, but when developed are sufficiently powerful, even in the absence of legislation, to assure the success or failure of any social or political institution. Public sentiment is the real force behind the Bank of England, whose operations are but slightly controlled by statute. Our new system will for years lack the assistance of this influence. In its absence, we must rely upon the second factor, which is adequate and helpful legislation. For this reason, as well as for others, the prohibition against bank membership on the Reserve Board seems wise.

CHAPTER VII

POWERS AND DUTIES OF THE FEDERAL RESERVE BOARD ENUMERATED

The Powers of the Board.—Turning from the subject of the composition of the Reserve Board and the qualifications of its members, the next question is that of its powers. These are of two general classes,—first, those that are enumerated under twelve headings in Section 11 of the Act; and, second, those that are to be found here and there throughout the Act either specifically or by implication. Both are summarized in the following digest, the numbers in parentheses after each indicating the section of the Act in which it may be found.

1. Readjust districts created by the organization committee and create new ones up to a maximum total of twelve. (2)

2. Call for payments on stock subscriptions. (2)
(5)

3. Compel, at its discretion, any national bank to cease to act as a reserve agent, if such bank fails to accept the terms of the Act prior to February 22, 1914. (2)

4. Direct dissolution proceedings against any national bank failing to become a member or to otherwise comply with provisions of the Act before December 23, 1914. (2)

5. Adopt and promulgate rules and regulations governing the transfer of stock of the Federal reserve banks. (2)

6. Approve the rules and regulations governing the operation of branches of the reserve banks, and to appoint, with power of removal, three of the seven directors for each of these branches. (3)

7. Supervise under the law the extension to member banks of discounts, advancements and accommodations. (4)

8. Designate three of the nine directors of each reserve bank, specifying one as chairman and "Federal reserve agent" and one as "deputy Federal reserve agent." The Reserve Board shall also fix the compensation of the Federal reserve agent, and must approve the compensation provided by the boards of directors of the reserve banks for directors, officers and employees.

(4)

9. Receive applications for membership from State banks and trust companies and decide upon rules and regulations governing their admission, subject to the provisions of the Act. (9)

10. Compel any member bank failing to comply with the Act or the regulations of the board to surrender its stock in a reserve bank. (9)

11. Levy semi-annual assessments upon the reserve banks for its estimated expenses during the succeeding six months, together with any deficit carried forward. (10)

12. Examine, at its discretion, the accounts, books and affairs of each reserve bank and of each member bank and require such statements and reports as it shall deem necessary. (11)

13. Permit, or on the vote of at least five members, require one reserve bank to rediscount the discounted paper of another at a rate of interest to be fixed by the board. (11)

14. Suspend for a period not exceeding thirty days and renew such suspension for periods not exceeding fifteen days, any reserve requirement specified in the Act, subject to certain taxes if the reserves fall below specified minimum percentages. (11)

15. Authorize, supervise and regulate the issue and retirement of Federal reserve notes. (11) (16)

16. Add to the existing number of reserve and central reserve cities, reclassify them, or terminate their designation as such. (11)

17. Suspend or remove any officer or director of

any reserve bank for cause stated to the official removed and to the said reserve bank. (11)

18. Require the writing off of doubtful or worthless assets upon the books and balance sheets of reserve banks. (11)

19. Suspend any reserve bank for violation of the Act, and take possession of and administer it with a view either to liquidation or reorganization. (11)

20. Require bonds of Federal reserve agents and regulate their safeguarding of collateral, money, etc. (11)

21. Exercise general supervision over the reserve banks. (11)

22. Upon application, grant to a national bank, when not in contravention of State or local law, the right to act under rules and regulations as trustee, executor, administrator or registrar of stocks and bonds. (11)

23. Employ attorneys, experts, assistants, clerks or other employees as needed, and fix their salaries. All such appointments may be made without reference to civil service rules, although the President may place said employees in the classified service. (11)

24. Approve the compensation and allowances voted by the board of directors of each reserve bank to its representative on the Federal Advisory Council. (12)

25. Call special meetings of the Federal Advisory Council. (12)

26. Determine or define (subject to stipulations in the Act) the character of paper eligible for discount by member banks. (13)

27. Limit the amount of rediscounts on paper drawn for agricultural purposes or based on live stock and with a maturity not exceeding six months, to a percentage of the capital of the reserve bank to which application for the rediscount is made. (13)

28. Impose restrictions, limitations and regulations upon rediscounts by the reserve banks. (13)

29. Draw up rules and regulations for the guidance of reserve banks in the purchase and sale in the open market of bills, acceptances, cable transfers, United States bonds and notes and certain specified State and municipal securities. (14)

30. Review and determine the rate of discount to be charged by the reserve banks for each class of paper. (14)

31. Authorize the establishment of correspondents and agencies of reserve banks in foreign countries. (14)

32. Receive through the Federal reserve agents, applications for Federal reserve notes, and at its discretion grant, in whole or in part, or reject entirely such applications. (16)

33. Require the deposit with the Federal reserve agent of an amount of collateral equal to the notes thus applied for and issued. Additional collateral may at any time be required to protect the notes already issued. (16)

34. Assign to each reserve bank a distinctive letter and serial number by which the notes issued to it may be identified. (16)

35. Require each reserve bank to maintain in the Treasury of the United States a redemption fund in gold against the reserve notes issued to it. (16)

36. Establish the rate of interest to be paid by each reserve bank for the notes it receives and upon the request of the Secretary of the Treasury require each reserve agent to transmit to the Treasury of the United States so much as may be required of the gold reserve held against the notes. (16)

37. By rule fix the charges to be collected by the member banks and by the reserve banks for their services in clearing or collecting checks and drafts. (16)

38. Make and promulgate regulations governing the transfer of funds between reserve banks. (16)

39. At its discretion the board may exercise the

functions of a clearing house for the reserve banks or designate a reserve bank to do so. (16)

40. Require each reserve bank to act as a clearing house for its member banks. (16)

41. Require the reserve banks to purchase United States bonds securing the national bank circulation to be retired. (18)

42. Approve the issue of new three per cent United States bonds, or one-year three per cent gold notes, in exchange for the two per cent United States bonds retired, or the issue of three per cent bonds in exchange for the one-year notes. (18)

43. Permit a member bank to act as the agent of a non-member bank in rediscounting. (19)

44. Prescribe regulations and penalties (subject to stipulations) under which a member bank, in order to meet existing liabilities, may withdraw its reserve held with a reserve bank. (19)

45. Authorize the examination of State banks and trust companies by State authorities instead of by Federal examiners and also direct such special examinations of them as it may see fit. (21)

46. Upon recommendation of the Comptroller of the Currency, fix the salaries of all bank examiners. (21)

47. Approve, directly or through the reserve agents, regulations by any reserve bank for the special examination of member banks within its district. (21)

48. Require a reserve bank to furnish any information as to the condition of any member bank in its district. (21)

49. Order a yearly examination of each reserve bank and, upon joint application of ten member banks, a special examination of any reserve bank. (21)

50. Add to the number of cities in which national banks shall not be permitted to loan on real estate. (24)

51. Authorize (subject to stipulations) the establishment by national banks of branches in foreign countries. (25)

52. Order special examinations of foreign branches of national banks. (25)

53. Approve (subject to stipulations) reductions in the capital stock of national banks below the amount of their outstanding circulation. (28)

In addition to this long list of powers of the Reserve Board there are a number of miscellaneous specifications, some of which are quite sweeping in their nature. Thus in Section 11 (i) the Reserve Board is empowered to "perform the duties, functions or services specified in this Act, and make all rules and regulations necessary to enable said board effectively to perform the same."

The Extent of these Powers.—There has been much comment upon the extent of these powers. They are undoubtedly sweeping and may be used either to help the operation of the system, or in such a manner as to bring about its downfall. The list just enumerated is long, and many of the items included are merely routine duties as, for example, requiring bonds of Federal reserve agents and assigning to each reserve bank a distinctive letter and serial number by which the notes issued to it may be identified. Most of them are important and their significance is discussed in the next chapter.

Limitations on the Board.—Lest this long list should seem to imply the existence of a body of men whose actions are subject to no control, the limitations upon their powers and the duties they must perform must be examined. Their power is great, but at the same time they are subject to several restraints, two of which are very important.

One of the restraints upon the board lies in the power of the President of the United States to remove any of them "for cause." Another is the requirement that they must publish each week a statement showing the condition of each Federal reserve bank and a consolidated statement for all the Federal reserve banks. They must also report to Congress the salaries of bank examiners which they have fixed, upon the recommendation of the Comptroller of the Currency. These requirements are of minor importance

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and in no way impair the powers essential to authoritative control.

The Power of the Secretary of the Treasury.—There are only two limitations of any considerable importance. One of these has to do with the relations of the Reserve Board to the Secretary of the Treasury who is one of its members. On many occasions there may be doubt as to the border line between the powers of each and to avoid any chance for dispute the Act specifically states in Section 10 that "Nothing in this Act contained shall be construed as taking away any powers heretofore vested by law in the Secretary of the Treasury, which relate to the supervision, management and control of the Treasury Department and bureaus under such department, and wherever any power vested by this Act in the Federal Reserve Board or the Federal reserve agent appears to conflict with the powers of the Secretary of the Treasury, such powers shall be exercised subject to the supervision and control of the Secretary."

The Federal Advisory Council.—The second important limitation upon their powers is in the creation of the Federal Advisory Council, composed of one representative of each reserve bank, selected annually by its board of directors. This council of bankers is to meet at Washington four times each year, and oftener if called by the Reserve Board. The council may hold such additional meetings as it sees fit, either in Washington or elsewhere, and may select its own officers and adopt its own methods of procedure. The only control which the Reserve Board has over this body is in its approval of the compensation and allowances voted for them by the directors of the reserve banks. This supervision is, of course, of little importance.

Acting as a body, or through its officers, the council has power to do three specific things, and the significance of each is dependent upon influences concerning which no one may safely predict. These powers are "(1) to confer directly with the Federal Reserve Board on general business conditions; (2) to make oral or written representations concerning matters within the jurisdiction of said board;

(3) to call for information and to make recommendations in regard to discount rates, rediscount business, note issues, reserve conditions in the various districts, the purchase and sale of gold or securities by reserve banks, open-market operations by said banks, and the general affairs of the reserve banking system."

The Importance of the Council.—A careful examination of this grant of powers makes it evident that the influence of this council may mean much or little. The Act authorizes it to confer, to make representations, to call for information and to make recommendations. The Reserve Board is not required to furnish the information, follow the recommendations, give heed to the representations or do anything more than go through the formality of holding the conferences.

From this situation any one of three very different results may develop. The Reserve Board may refuse to listen to the advice proffered by the council, and compel it to become merely a formal body with little or no influence. The council, unable to compel recognition in any direct manner, could then appeal only to public opinion for support. On the other hand, the council may dominate the Reserve Board, and through this dominance gain control of the entire system. Such an outcome would be disastrous to the success of the new organization, for it would strike at one of the very foundations of the Act, viz.: that the system must not be controlled by the banks. The third possibility is the one to be desired. It is to be hoped that the council will enter earnestly upon the task of furnishing complete, helpful and disinterested information and that the Reserve Board, while refusing to be dominated, will always be ready to analyze carefully the information furnished, and to act upon the proffered advice if it is good. It is also to be hoped that the board will freely furnish to the council such information as may be a proper matter for inquiry by the representatives of the banks which are being governed, unless the disclosure of such information is contrary to the public interest.

The Reserve Board Must Be Supreme.—That there will be differences of opinion between the two bodies is inevitable, but no question can be raised as to which should be supreme. The Advisory Council must not be allowed to review the decisions of the Reserve Board. Such a situation would be paralleled if a board composed of railway presidents were to review and modify the rulings of the Interstate Commerce Commission. Just what functions may properly be performed by the council is open to question. They certainly may not demand information that the board does not wish to furnish, they are not in a position to impose unwelcome advice on the board, and it would be fatal to the success of the entire system if their opinions should dominate directly or indirectly the decisions of the board.

In the new system there is a proper field for the bankers and another for the board. All matters that have to do with banking routine are left to the former. They scrutinize paper and attend to all of the details in managing the reserve banks. The Reserve Board is given powers of supervision. The relation between them is very similar to that between the Interstate Commerce Commission and the railways of the country. The railroads manage their own affairs in all their details, subject to the general supervision of the commission. The bankers will manage their own banks and also the reserve banks, while the Reserve Board will supervise this management in the interests of the public of which the bankers themselves are a part.

Any division of duties between these two bodies which involves a yielding of power by the Reserve Board will be fatal. The only safe solution is for the Advisory Council to devote itself to the collection and presentation of facts and the furnishing of information, but never advice, except when called for. The outcome will be determined largely by the strength of the leading personalities in the two groups, especially at the outset. Precedents either way may mean much for the future, and the entire spirit of the system will be determined by the outcome.

CHAPTER VIII

THE POWERS OF THE FEDERAL RESERVE BOARD ANALYZED

The Powers Classified.—The most important of the powers of the Reserve Board may be discussed under six general heads in the following order: (1) organization, (2) rediscounts, (3) note issues, (4) control over reserve banks, (5) control over member banks, and (6) miscellaneous powers. Prior to the appointment of the Reserve Board (which we may refer to hereafter as the board) the organization committee has charge of the organization of the system. Since the former will take up the work of the latter we need attempt no close distinctions between their duties.

Organizing the System.—The districting of the country is one of the most important of the duties to be performed. This task has been discussed elsewhere and here we may merely repeat that the location of the districts will have much to do with the smooth and effective working of the system. If they are so arranged as to aid the natural movements of business and finance, the success of the new law will be materially aided; if the reverse shall occur, friction will be introduced and failure may follow.

In carrying on the work of organization the board may determine the date upon which the first call for stock payments may be issued to each subscribing bank and, by the exercise of discretion in the wise distribution of these calls, may materially lessen difficulties that may be encountered in securing the necessary gold without injury to business. In drawing up the rules and regulations governing the admission of State banks to membership, important assistance may also be given. It is in the ability of the board to force prompt action by the national banks on the question of membership, however, that its real power may first be clearly shown. The use of coercion may be rendered entirely unnecessary by a voluntary movement of the banks to enter,

but this very willingness may be due to the power of the board. National banks in reserve and central reserve cities must signify prior to February 22, 1914, their willingness to enter the system, unless they wish to risk the loss of their reserve accounts. If they have not signified their intention of joining by the above date, they may, upon thirty days' notice, be required to surrender their reserve deposits. It seems probable that in most cases this will be sufficient to compel their entrance. If they do not accede within one year, dissolution proceedings may be directed by the board. The method of organizing the Federal reserve banks has been reviewed at length in a preceding chapter.

Supervision of Rediscounts.—The second feature of the board's work is that of supervision over rediscounting. The Act indicates the classes of paper that may be presented to each reserve bank by its members for rediscounting, but inasmuch as a complete definition of the commercial paper referred to is extremely difficult, there is left with the board the right to define the exact meaning of the general provisions of the Act. This is of great significance to many bankers who have maintained that their portfolios lack what is ordinarily known as commercial paper. Although based upon legitimate commercial transactions, much of it is in its form not acceptable paper. This condition is due to the current business practice of the American people, and doubt is expressed whether the board will be able so to define commercial paper as to make rediscounting possible for many banks. The rate for rediscounting which is to be charged by each Federal reserve bank is subject to the review and determination of the Reserve Board. Since a majority of the board of directors of each reserve bank will be chosen by the bankers themselves, and since a low rate of rediscount is to the advantage of each member bank, it is quite possible that the reserve bank directorate will hesitate to raise the rediscount rate. Thus it may at times be advisable or necessary for the Reserve Board to insist on a higher rate than the one suggested by the reserve bank itself. This, of course, gives them large power.

In connection with their general supervision of rediscounting the board of directors of each reserve bank is instructed in Section 4 to "administer the affairs of said bank fairly and impartially and without discrimination in favor of or against any member bank or banks, and shall, subject to the provisions of the law and the orders of the Federal Reserve Board, extend to each member bank such discounts, advancements and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks." This is intended to insure impartial action by each reserve bank. If the paper thus rediscounted at the reserve bank is presented to the Federal reserve agent for the purpose of securing Federal reserve notes, the paper offered as collateral may be accepted or rejected in whole or in part. Also the board has a general supervision over the extension (to members) of accommodations that are authorized by the Act. These various provisions give such power over the whole practice of rediscounting that they may dictate its general operation, although they are not called upon to examine, except perhaps in unusual cases, each piece of paper that is presented. Doubtless their rulings for the most part will be determined by their judgment as to whether there has been an over-extension of credit in any particular district, there being left to each reserve bank the details of passing upon particular commercial paper.

Supervision of Note Issues.—The third part of their work is the supervision of note issues. As explained in later chapters, the present national bank notes are gradually to be displaced by bond-secured notes of the reserve banks. In addition there will be issued, as occasion arises, a new form of money known as Federal reserve notes. The issue and retirement of these notes are to be under the general supervision of the board. Particular powers granted to them in this matter are the right to accept or reject all or a part of the commercial paper that is offered by the reserve banks as collateral for these notes; to require additional collateral for notes already issued, if in the board's judg-

ment such additional collateral is necessary; to demand that a part of the forty per cent gold reserve behind these notes be kept in the Treasury of the United States, if in their judgment this is wise; and to fix the rate of interest which each reserve bank is to pay for the notes issued through it. This right to accept or reject collateral or to require an increase in its amount and to fix the rate of interest at which notes may be issued, gives entire control of note issues.

Control of the Reserve Banks.—Fourth in the list of powers of the Reserve Board is their control over reserve banks. This control involves a general supervision and, in particular, gives a large number of very important powers. Only three of the directors of each reserve bank are to be appointed by the board, but the board has the right "to suspend or remove any officer or director of any Federal reserve bank, the cause of such removal to be forthwith communicated in writing by the Federal Reserve Board to the removed officer or director and to said bank." It seems hardly necessary to say that such a power places the reserve bank almost completely under the control of the Reserve Board. They may remove not merely the directors appointed by themselves, but upon the specification of cause may remove the directors that have been chosen by the member banks, as well as the officers of that institution.

The accounts of the reserve banks may be examined and these banks required to present periodical statements and reports to the board. If upon examination made by the examiners of the Reserve Board any assets of the reserve banks are found to be of doubtful value, the board may require that they be written off. If the reserve bank violates any of the provisions of the Act the Reserve Board may suspend its operations, take possession of it and administer its affairs during the period of suspension, and, if deemed advisable, liquidate or reorganize the bank.

Direction of Open Market Operations.—The open market operations of each bank, which will be discussed later, are also subject to the supervision of the Reserve

Board. If a reserve bank wishes to maintain a foreign banking account, appoint foreign correspondents, or establish agencies abroad, these things may be done only with the consent of the Reserve Board and subject to its regulations. If conditions warrant, the board may suspend the reserve requirements of the reserve banks, allowing them to keep less than the amount of reserve required by the Act, subject, however, to certain limitations to which reference is made elsewhere. If one of the reserve banks finds itself in difficulty the board may allow another bank to assist it, or, in case of hesitation, may compel such assistance to be given, by requiring a particular bank to rediscount commercial paper owned by the distressed institution. The amount of the redemption fund that must be kept by the reserve bank against the reserve notes issued through it, is to be fixed by the Reserve Board, although it may not be less than five per cent of the amount of such notes outstanding.

Fixing Collection Charges.—Fully as important as many of the other provisions is the right of the Reserve Board to fix the charges for collection which may be imposed by the reserve bank for the service rendered in clearing. Just how significant this will be is to be determined largely by the board's policy, but it is capable of influencing, to an almost immeasurable extent, the success or failure of this feature of the new system. Inasmuch as the board may also require any one of the reserve banks to act as a clearing house within its own district, the ability to dictate concerning collection matters is evidently one of the most important of the powers conferred.

Control over Member Banks.—Not only does the Reserve Board have a great measure of control over the reserve banks, but it is given a large amount of control over the individual member banks. The right to suspend reserve requirements imposed by the Act applies not merely to the reserve of the reserve banks but to that of member banks. The section granting this power refers to "any reserve requirement specified in this Act." Granting this sus-

pension may be the salvation of a bank in difficulty, while refusal to grant it may be the means of compelling a receivership. The board may at its pleasure examine the accounts, books, and affairs of the member bank, as well as those of a reserve bank, and require statements and reports as it may deem necessary. If conditions, in the judgment of the board, seem to warrant the action, the member bank may be allowed to withdraw its reserve at a reserve bank to meet its existing liabilities, although at the same time the member bank is forbidden to continue lending.

Fixing Collection Charges for Member Banks.—We have already noted that the board may define the character of paper eligible for rediscount by member banks at reserve banks, and may fix the collection charges that may be made by the reserve bank for items on points not within the same district. The power of the board, however, goes further. The charges to be collected by member banks from their patrons, whose checks are cleared through the reserve banks, are to be fixed by the Reserve Board, thus giving to that body the power to determine to a considerable extent the earnings of many of the member banks. Still further the board may allow a member bank to act as the medium or agent of a non-member bank in securing discounts from a reserve bank. It may authorize the establishment by member banks with a capital and surplus of \$1,000,000 or more, of branches in foreign countries or in dependencies of the United States. The board may also change the classification of the reserve and central reserve cities of the United States, add to their number or terminate the designation of any city as such; may, at its discretion, allow a bank making application therefor to act as trustee, executor, administrator or registrar of stocks and bonds under such rules and regulations as the board may prescribe, provided that such grant is not in contravention of State or local law. A member bank may also be compelled to surrender its stock in the reserve bank.

Miscellaneous Powers.—A number of miscellaneous powers conferred upon the board are difficult to classify,

but must be enumerated. The board may act as a clearing house for the reserve banks of the country; may designate one of the reserve banks to act as a clearing house for the others; and may require each reserve bank to act as a clearing house for its member banks. It will supervise the retirement of the national bank notes and the substitution therefor of bond-secured circulation issued by the reserve banks, and may also approve the retirement of this latter circulation and allow each reserve bank to secure three per cent United States bonds, without the circulation privilege, or one year three per cent United States notes, also without the circulation privilege, in place of the two per cent United States bonds. The board is required to fix the salaries of bank examiners upon the recommendation of the Comptroller of the Currency, thus changing the present system of fees and gratuities. It may add to the list of cities which may not, under the terms of the Act, lend to a limited extent on real estate security. They may refuse to member banks the right to act for non-members in applying for or receiving discounts from a reserve bank.

Great Responsibility on the Board.—Even this analysis of the powers of the Reserve Board does not fully indicate the extent of authority that has been given them; they are subject to only a few limitations. The powers that are granted are not for the most part a mere specification of routine duty, but are powers in whose exercise there is imperative need for discretion. A board of ability may, through wise and tactful use of the authority bestowed upon it, render almost certain the success of the system, and, on the other hand, a board that is incompetent or not fully alive to the importance of its problems and the tremendous responsibilities involved, may through injudicious action, through sheer carelessness, or through lack of tact, prevent the successful operation of the new system at the very start.

CHAPTER IX

REDISCOUNTS

The General Need for Rediscounts in Crises.—One of the most important functions which the Federal reserve banks will perform for their members is the purchase or rediscounting of commercial paper owned by them. We have seen that one of the most glaring defects in our banking system is the absence of any agency to which the 25,000 banks in this country can turn to convert their assets into money, when a run or some other unforeseen contingency places them under an unusual strain. Roughly speaking, about one-tenth of the deposits of our banks are held in the form of cash, or its equivalent. The ability of a bank to withstand a run or weather a panic depends upon its success in disposing of the commercial paper, collateral loans, and securities owned, which represent the investment of the remaining nine-tenths of its deposits. A single bank in normal times could generally accomplish this feat, but in panic times when every bank is pressed and none are able or willing to buy, the extent to which assets could be converted into cash has been very small. Briefly, the provisions relating to rediscount, and the companion provisions concerning note issues, aim to create an adequate and reliable source to which the banks can turn, and through which a large part of their assets can be converted into money to satisfy depositors' demands.

Provisions of the Act Concerning Rediscounts.—Section 13 of the Act provides that "Upon the indorsement of any of its member banks, with a waiver of demand, notice and protest by such bank, any Federal reserve bank may discount notes, drafts, and bills of exchange arising out of actual commercial transactions; that is, notes, drafts, and bills of exchange issued or drawn for agricultural, industrial or commercial purposes, or the proceeds of which have

been used, or are to be used, for such purposes, the Federal Reserve Board to have the right to determine or define the character of the paper thus eligible for discount, within the meaning of this Act. Nothing in this Act contained shall be construed to prohibit such notes, drafts, and bills of exchange, secured by staple agricultural products, or other goods, wares, or merchandise from being eligible for such discount; but such definition shall not include notes, drafts, or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the government of the United States. Notes, drafts, and bills admitted to discount under the terms of this paragraph must have a maturity at the time of discount of not more than ninety days: Provided, That notes, drafts, and bills drawn or issued for agricultural purposes or based on live stock and having a maturity not exceeding six months may be discounted in an amount to be limited to a percentage of the capital of the Federal reserve bank, to be ascertained and fixed by the Federal Reserve Board."

What Is a Rediscount?—What is a rediscount? It is in substance very similar to the transaction between a merchant who holds a note of his customer and, desiring to convert it into cash, goes to his bank, endorses the note and procures its discount, the proceeds being credited in the merchant's account upon the books of the bank. Suppose that a few days later this bank for some reason needs additional funds, and in order to procure them selects this note discounted by the merchant, endorses it below the merchant's endorsement and goes to the Federal reserve bank of which it is a member and procures its discount. The note has been rediscounted; it has now a triple security arising, first, out of the responsibility of its maker who is planning to meet it out of the funds coming to him through the operations of his business; second, the value which the endorsement or guarantee of the merchant gives to it, and finally, the strength which is given it by the endorsement of this member bank which has discounted it with the Fed-

eral reserve bank. Rediscounting within the meaning of the Act of 1913 is, therefore, the sale of commercial paper by a bank, which has endorsed it, to a banker's bank whose business it is to buy paper from banks when they for any good reason may find it necessary to convert a part of their assets into cash. In the South it is considered good banking for a bank to rediscount or borrow from other banking institutions. To a certain extent this is true in the West and among other banks throughout the country; but in the large cities and in the manufacturing districts of the East, the tradition has grown up that rediscounting is bad banking practice and that no institution should resort to it. This prejudice is due in part to the fact that the national banks must report rediscounts among their liabilities; and to a large class of the banking community the appearance of such an item in a bank's statement is bound to give rise to unfavorable comments. In addition, there is really no rediscount market. The reserve city and central reserve city banks, from which the funds must come, are, by their position, naturally unwilling to invest largely in time paper. The greater proportion of their deposits are subject to withdrawal upon demand, and this demand may come at any moment, particularly for the bankers' deposits which make up roughly about one-half of the total.

Limitations in the Past on Rediscounting.—In addition, the reserve city and central reserve city banks as a class are the depositories of a considerable portion of the cash reserves of the other banks of the country. With this large stream of funds to augment their operations it would appear that they should be content and not plunge still further into debt by borrowing through rediscounts. As far as the matter of rediscounts is concerned these banks have felt that they should be lenders and not borrowers.

Even were the central reserve city banks willing to cooperate by granting rediscounts, their ability to do so would be very limited. Under our system of legislation the central reserve city banks, like all of the national banks, are required to keep a minimum reserve. In practice they keep

but a small percentage above the legal minimum. Any large rediscounting, which would take cash out of New York, would run this reserve down below the minimum, and hence would require the cessation of rediscounting. Because of the fact that the New York banks keep practically all of their funds employed, they are not in a position to meet a large seasonal demand for rediscounts.

A very considerable proportion of the rediscounting which is done, however, is handled by the New York banks. The practice, as it has developed, is that a bank can rediscount only with those institutions with which it carries a reserve account, and that the amount of rediscounts or loans which it can negotiate depends upon the balance which it carries with its reserve agent. The New York banks have an ironclad rule that rediscounts shall not exceed from four to five times the balance carried by the borrowing bank. We therefore have a situation where the rediscounts bear no relation to the needs of the bank which is seeking to borrow, or of the business community which it serves. It is limited almost absolutely by the balance which is carried in New York. The rule concerning rediscounts works only one way.

Rediscounting and the Panic of 1907.—One of the things which made the panic of 1907 a national catastrophe was the fact that when the country banks came to New York for their accustomed loans or rediscounts, they found that because of the trouble, then confined entirely to that city, they could not get the accustomed accommodation; that they could not secure the return of the surplus funds, which they had on deposit, over and above the required reserve; and that, therefore, they were forced to follow the bad example of New York and suspend specie payments in order to protect themselves from destruction. The new banking and currency act is designed, among other things, to eliminate this element of uncertainty, by giving to the banks a dependable source that will not dry up when the real need arises.

Effect of Absence of Discount Market on American Banking Methods.—As a result of the uncertainty which has attached to the ability of a bank to rediscount its commercial paper, the development of American banking has been very different from that in other countries, where a large and dependable rediscount market exists. In our large cities, the collateral loan is viewed as the most desirable, both because such loans can to a considerable extent be made "call loans," the repayment of which can be demanded at any time, and because the character of the security, especially where it consists of listed bonds or stocks, the values of which are generally known or easily ascertained, makes it much easier to shift the loan, when necessary, from one bank to another. Both in theory and in fact during ninety-nine out of every hundred months a bank is at present safer if its money is loaned out on collateral than if its funds are put into commercial paper.

Roughly speaking, the national banks on October 21, 1913, had made something over \$6,260,000,000 of loans and discounts, while at the same date they owned bonds, securities, etc., other than government bonds, with a book value of something over \$1,038,000,000.

The method by which a bank raises money through its security investments is well described by Mr. Andrew J. Frame, one of the leading bankers of the Middle West, before the House Committee. In relating the experience of his bank in the panic of 1893, Mr. Frame said: "I took \$100,000 and went to Chicago and sold \$50,000 of bonds at 92 cents on the dollar, which cost us \$1.02, so we lost \$5,000 in that operation. * * * At the same time I raised some additional cash. I found a broker that would lend me money at seven per cent interest, with the payment of a small commission besides, which made it eight per cent. I borrowed \$50,000, putting up the bonds as collateral security, for three months. This cost us two per cent for the three months. The bonds we put up as collateral security drew five per cent interest. We paid eight per cent for the \$50,000, and therefore lost the dif-

ference between five per cent and eight per cent for three months, which was a loss of three per cent per annum on the \$50,000 for three months. * * * Three per cent per annum for three months means a loss of only three-quarters of one per cent for the three months, so that it cost us \$375 to obtain that \$50,000 over and above the rate of interest we were receiving on our bonds." Thus at a time when the rediscounting of commercial paper was absolutely non-existent, this country banker was able to raise the money at a reasonable cost through the use of his securities.

In spite of the value which bankers place on collateral loans and the ownership of choice securities, the fact nevertheless remains that, taking the banks of the country as a whole, and especially the so-called country banks, commercial paper is given first place on the roll of banking investment. It is estimated that \$4,500,000,000 of the assets of the banks are invested in this class of security, far outranking in amount any other form of investment.

Advantages Claimed for Rediscounts.—The advocates of rediscounts assert that the creation of the Federal reserve banks will revolutionize banking methods. With a dependable and ever-ready market for the rediscounting of paper, the bankers will place smaller reliance upon security investments for aid in times of stress, and will come to depend more upon commercial paper, as is the case abroad. It is further predicted that when the banks have been required to deposit a part of their funds with the regional banks, the use of which can only be procured through rediscounting, that they will modify their sentiments against rediscounting, and that the practice will become almost universal. The sentiment among bankers, if we can judge from the expressions of those who appeared before the Banking and Currency Committees of the House and Senate, is almost unanimous that rediscounting under a proper system is good banking and of advantage to both the banks and the country.

The reasons which have prompted leading bankers of

this country, almost without exception, to endorse the provisions of the bill legalizing and encouraging rediscounting are so compelling that one is irresistibly forced to the conclusion that this practice will prove a great boon both to the banks and to the business community. From the standpoint of the banks, the greatest advantage is the safety and security which it confers, making it impossible for a sound institution to be ruined by a run.

Illustration of Advantages by a Foreign Example.—

Mr. A. Barton Hepburn, Chairman of the Board of Directors of the Chase Bank of New York City, in making this point, gave a most happy illustration of the advantages of rediscount to the bank in times of unexpected pressure. He said: "Some years ago I called upon the Credit Lyonnais in Paris, one of the great banks of the world. The gentlemen with whom I was in conversation passed over to me their last bank statement. I glanced over it and remarked, 'You owe a great deal of money.'

" 'What is that you say!'

" 'You owe a great deal of money!'

" 'What do you mean?'

" 'Your deposits are about \$350,000,000.'

" 'Oh, yes, but we could pay them off easily if we had to.'

" 'Could you? How long would it take you to pay them off in case of necessity?'

" 'The element of time would not enter into the matter at all, except in so far as required to perform the physical labor.'

" 'Tell me just how you would do it.'

" 'Almost thinking I was questioning the condition of this bank he took the balance sheet and proceeded.

" 'Well, we have so much cash; we will deduct that.'

" 'Yes.'

" 'Then we have so much due from banks; we could value against that and deduct the same.'

" 'Yes.'

" 'We have so much exchange, acceptances, etc., which have an immediate market. We could realize upon and deduct that.'

“ ‘Yes.’

“ ‘Now we have reduced our obligations in this matter to something less than \$200,000,000, and we have very much more than that in commercial paper.’

“ ‘Yes, but how are you going to pay debts with commercial paper?’

“ ‘Take it to the Bank of France and get currency for it.’

“ ‘Could you do that?’

“ ‘Certainly.’

“ ‘Is there any law which would compel the Bank of France to discount your commercial paper without limit?’

“ ‘Law—yes; the law of its being; that is what the bank was created for.’

“ ‘I assured him his explanation was most interesting, but that no one could do that in my country. I explained that in case of a strong demand we first bought gold abroad, and if that was impracticable or involved too much time, we sometimes had to resort to clearing house certificates, a form of currency suspension, and frequently perfectly solvent banks were compelled to close their doors for want of currency, notwithstanding that they had plenty of good commercial assets.’”

This unhappy condition is fortunately ended. Through the organization of the Federal reserve banking system it will be possible for member banks, which have been well managed and have abundant good assets, to discount such portion of their commercial paper as may be necessary, in order to secure funds to extend additional accommodation to their customers, or to meet unusual withdrawals on the part of depositors.

Rediscounting Will Improve the Market for Commercial Paper.—Commercial paper instead of being a relatively slow asset will now become a prime and quick asset. Instead of relying upon chance or good fortune to find a buyer the bank will have a large market always ready to purchase good bills. Mr. Paul N. Warburg, of the firm of Kuhn, Loeb & Co. of New York, in discussing this impending change, declared that commercial paper will, because of

this change, largely take the place of the "call loans" upon collateral securities as the secondary reserve of our banks, thus making available for the business community a large amount of money which up to the present time, because of the inherent defects in our banking system, has necessarily been denied them. It is largely upon this release of capital, or rather its diversion into business channels from the present speculative channels, that the President and Democratic leaders rely for the fruition of their prophecy that the new currency act will prove a great boon to business and will increase the fund of capital upon which business men may draw in financing their operations.

Mr. Frank A. Vanderlip, President of the National City Bank of New York City, declared before the Senate Committee that "undoubtedly a bank will feel freer, if it has a central reserve bank to go to for rediscounts, than it does now. You have to depend upon the good judgment and conservativeness of that banker. If he feels that he can rediscount any time, anything he has, and he is a reckless man, he will loan too much. But you will have as a governor the power of control of your regional reserve bank board and of the Federal Board. That is why I said that there is not an authority given to this Federal Reserve Board which it ought not to have. My objection is to the constitution of the board and not to the authority. If the bankers in a locality are getting reckless, if they are loaning more because they can rediscount than is wise for them to loan, there ought to be some authority higher up which can put a restraint upon them."

Advantages from Rediscounting to the Business Community.—Running parallel with the feeling of security and safety which rediscounting will confer upon member banks, there will be created a similar feeling of assurance and security on the part of the business community. The development of this sentiment will take time—in fact, it may require conspicuously successful handling of several succeeding periods of stress to thoroughly convince the business community that the new law makes it possible for

the member banks to take care of their borrowers under all conditions; and to obviate the necessity for calling loans at a time when both business and banking common sense would require that they should be expanded, or at least continued. What is even more important, the new law, if wisely administered, will eliminate the necessity of the suspension of cash payments. With the banks able to rediscount, and to secure Federal reserve notes through rediscounting, there will no longer be any reason for the hoarding of cash or the refusal to pay out money upon demand. If foreign experience is any criterion, the new law should also reduce the rate at which commercial loans can be placed, because they will become more liquid, and hence more desirable to banks. In fact the present situation, where collateral loans can be placed at much lower rates than commercial paper loans, may be completely reversed, and we may find the duplication in this country of European conditions, where the commercial borrower secures the lowest rate of any class of borrowers.

Reserve Banks Can Rediscount Only for Member Banks.—It should be remembered that, under the provisions of the Act, the reserve banks are limited to the member banks in their purchases or discounts of commercial paper. They can not go into the open market and purchase paper from note brokers or from banks which are not stockholders in the particular reserve bank which is seeking an investment. The underlying motives concerning the reserve banks are that they shall be bankers' banks, doing business exclusively with banks, and having no direct relations with the business public. In the second place, the Act strictly limits the rediscount privilege to acceptances and "notes, drafts and bills of exchange issued or drawn for agricultural, industrial, or commercial purposes, or the proceeds of which have been used or are to be used for such purposes, the Federal Reserve Board to have the right to determine or define the character of the paper thus eligible for discount, within the meaning of this Act." In the hearings before the Currency Committees, considerable criticism of this phra-

seology was heard, it being contended that too great latitude was given to the board in the definition of paper, and that the power might be abused. Accordingly a qualifying phrase was inserted which provided, in substance, that this clause was not to be construed to prohibit notes, drafts or bills of exchange secured by staple agricultural products or other goods, wares or merchandise from being eligible for such discounts; but that this clause shall not be so construed to permit the rediscounting of "notes, drafts, or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds or other investment securities, except bonds and notes of the Government of the United States."

Mr. Samuel Untermyer aptly phrases the thought underlying the definition of paper eligible for rediscount when he states, "Commercial paper, as I understand it, is that which represents an actual transaction in the consummated purchase and sale of merchandise intended for resale and consumption. It must answer the test of being an obligation that automatically discharges itself in the ordinary course of business."

Why the Rediscount Privilege is Limited to Commercial Paper.—Commercial paper is not necessarily a safer asset than many other kinds of security. Unlike loans upon securities it is, to a very large extent, automatically liquidated through the closing of the business transactions which gave rise to the paper. Loans upon securities, on the other hand, are really loans upon a long time evidence of ownership or indebtedness of a property. The collateral either does not liquidate at all, as in the case of stock; or if it does liquidate, as in the case of bonds, it is usually only after the lapse of a number of years.

According to the provisions of the Act, notes, drafts and bills admitted to discount must have a maturity at the time of discount of not more than ninety days; "provided that notes, drafts, and bills drawn or issued for agricultural purposes or based on live stock and having a maturity not exceeding six months may be discounted in

an amount to be limited to a percentage of the capital of the Federal reserve bank, to be ascertained and fixed by the Federal Reserve Board." The foregoing proviso was inserted at the instance of the country bankers, many of whom protested against the limitation of their right to discount only paper maturing within ninety days. The country bankers, however, were not unanimous in the position that such limitation worked a serious hardship upon them.

Mr. George M. Reynolds, President of the Continental and Commercial National Bank of Chicago, combated the idea that the ninety-day limitation inflicted an unusual hardship upon the country banker because the city banker has a larger portion of short-time paper than the smaller institutions. He pointed out that the law did not say that only paper running for a period of ninety days or less could be accepted; but that a six-month note, for example, could be discounted when the date of maturity was not more than ninety days distant. He was of the opinion that the small banks would have a sufficient quantity of the kind of paper which would be accepted if they were doing a conservative banking business, and if they were not doing such a business they did not deserve to be accommodated.

The same view is expressed by many country bankers, as for example by Mr. Thomas C. McRae, President of the Bank of Prescott, Arkansas, who pointed out that while farmers' paper is usually for from three to nine months, yet inasmuch as this paper is given about the first of March, and the bank does not need additional funds until June or July, it follows that a large proportion of the paper comes within the three months' maturity limit before the need for rediscounting arises.

Another country banker, Mr. F. M. Law, of the First National Bank of Beaumont, Texas, stated to the Senate Banking and Currency Committee that generally fifty per cent of his loans are six-months paper, while twenty-five per cent run for less than this time and twenty-five per

cent. run more than six months. He agreed with Mr. McRae that the bank would not need to rediscount its six-months paper until within three months of maturity, because of the fact that at least six months' time intervened between the planting season when the paper was given, and the time when the bank needed to rediscount. He declared further that, from his experience, he would conclude that under the worst circumstances at least one-half of the total loans on commercial paper would be eligible for rediscount at any time. This would mean that if a bank were carrying a fifteen per cent cash reserve, of which six per cent was in its own vaults, and if fifty per cent of its paper were rediscountable, the institution would be able to convert at least fifty-five per cent of its deposits into cash without taking into consideration the sale of securities or the liquidation of collateral loans, which the bank might hold.

The Question of the Limitation of Ninety-day Maturities.—The large majority of the country bankers who protested against the ninety-day limit agreed substantially with Mr. Law's conclusion that fifty per cent of the commercial paper held by the country banks would be eligible for rediscount under the ninety-day limit. They point out with great force, however, that the situation which this would create contains in itself elements of danger. The maximum expansion in the loans of a bank could not exceed fifty per cent of its deposits, for a larger volume of paper for rediscount could not be secured. The assumption that one-half of the bank's paper was available is based, moreover, upon the fact that the bank will never desire to rediscount until the customary time for securing money to move the crops. If a panic should unexpectedly develop in April or May the bank would be practically helpless; for the great majority of its paper would by that time have run only a month or two, and would not mature within ninety days. The system under these conditions would not be as good as under the previous arrangement; for the country bank would have withdrawn its balances

from its present reserve agents in obedience to the Federal Reserve Act, and would, therefore, to a large degree, have cut off its ability to borrow from these institutions.

Reasons for Admitting Certain Six-month Maturities.—It is because of this possible contingency that the amendment noted above was inserted in the law, which gives to the Federal Reserve Board the power to extend the privilege of rediscounting commercial paper arising out of an agricultural loan, or based on live stock, having a maturity of not more than six months. It must be remembered that the right to discount six-months paper of this character is not an absolute one, for the amount of such paper which a bank can rediscount is subject to the rulings of the Federal Reserve Board, after the system is organized and put into operation. The authority may be so narrowly circumscribed as to contribute but little to the successful handling of such a situation as is outlined above. It is probable, however, that the Federal Reserve Board will take a liberal attitude as regards this matter. Inflation, if it occurs, will more likely appear in the cities; and should a real emergency arise, where banks will be pressed because of the ninety-day limit, the Federal Reserve Board will doubtless extend every consideration to them, particularly if the report of the examiners of the Federal reserve bank, of which they are members, indicates that they are sound and have been well managed.

CHAPTER X

THE BUSINESS OF REDISCOUNTING

The Importance of a Good Reserve.—Much diversity of opinion has been expressed by bankers as to the extent to which rediscounting will be practised. There is a general agreement among them that the privilege will be extended to member banks only when they have a satisfactory balance with the reserve bank. Through the moral force which can be exerted by such a requirement, it is believed that in this country we can get away from the vicious practice followed by many bankers of keeping at all times only the minimum amount of cash required by law. Such a practice means, in substance, that the bank really has no reserve in the true sense of the word, for the minimum, as specified by law, is a "dead" reserve. Under the requirements of the National Bank Act, no loans or discounts can be made or dividends paid when the reserve is below the legal limit. A bank, therefore, which constantly follows the practice of keeping as closely as possible to the minimum limit, is practically unable to extend additional loans to customers in times of stress. So far as taking care of a business community is concerned, it can therefore be said that the reserve is "dead." The only value of a reserve that just meets the legal limitation is to promote confidence on the part of the public in the solvency of the bank, and to enable it to meet a run, or unusual demands of its depositors. However, since our law accustoms us to look upon a fixed percentage as necessary to the safety of a bank, when an institution's reserve falls below the legal limit distrust and concern are immediately aroused among its depositors, and the severity of the run is thereby increased. If the reserve banks can cause that portion of the banks of the country which endeavor to keep as small a reserve as possible to expand their reserve, keeping a substantial surplus

above the legal minimum, it will have accomplished a great work.

The Probable Extent of Rediscounting.—Certain prominent business men and bankers stated to the Senate Committee on Banking and Currency that in their opinion the demand for rediscounting would be only occasional and would be confined, generally speaking, almost entirely to the few weeks of the crop-moving period. During the balance of the year the funds lying in the vaults of the reserve banks would be practically idle. Expenses of operation would continue and, under these circumstances, it would be impossible for them to earn a fair profit. The temptation of their boards of directors to put the money to work would be almost irresistible, and this might lead to serious trouble because it would encourage the regional banks to make loans upon a basis which would be disastrous to business conditions generally, causing inflation or over-extension of bank credit.

This group of men argued strongly that, if their conclusions were correct, it would be better to utilize the present clearing house associations in the large cities, which have had a definite work to perform, and to give to them the power of rediscounting and of note issue. Without stopping to examine the correctness of this contention, which can not be determined until we have investigated the question of note issue and the other work which the reserve banks will do, it should be observed that the great majority of bankers who appeared before the Congressional committees did not share this gloomy view.

A large number of them expressed the opinion that rediscounts should and will be very moderate at first. Mr. Sol Wexler, one of the leading bankers of the South, stated that in his judgment rediscounts were needed "only in time of stress." Many bankers did not go as far as Mr. Wexler, but the consensus of opinion was that, in the beginning at least, they should be very moderate.

Arguments for and against the Practice.—It is almost impossible to form any accurate conclusion as to the extent

to which rediscounting will be done. We have next to examine the statistics concerning the amount of rediscounting now done by the national banks in the various sections of the country. We find, in brief, that on October 21, 1913, the national banks had rediscounted with other national banks \$16,516,347.34 of notes and bills, and that they had borrowed on their own notes \$83,943,695.90. This borrowing has been confined in the past almost entirely to the country banks, and has been limited because of the lack of any large source from which such loans could be procured. The bankers are divided as to the view which the reserve and central reserve city banks will have on the advisability of beginning the practice. Many contend that because of the removal of the reasons which have given rise to the objections and because of the fact that, as we shall see later on, a very severe strain will be put upon the central reserve cities to repay the balances carried with them by their country correspondents, these banks will be forced to adopt it. On the other hand, bankers equally as eminent assert that it will take years to develop a practice of rediscounting by central reserve and reserve city banks. The latter group are of the opinion that the funds which must be provided by the readjustment of the reserve of the member banks will be procured by the New York, Chicago and other central reserve and reserve city banks through recalling the collateral loans as rapidly as can safely be done, and through the collection of the commercial paper which these banks have purchased for investment. If this should prove to be the plan followed, it will mean that the large borrowers, whose paper has been sold by note brokers or has been discounted directly by the large banks in big cities, will suddenly find their accustomed line of credit cut off, and will be forced to seek new channels for loans. Such a revolution in lending methods would lead to considerable uncertainty and some trouble for the business interests. It is to be hoped, however, that no such situation will develop. If the New York banks should curtail to a large degree their purchases of commercial paper, it would seem to follow

that the rediscounts of other banks would thereby be sympathetically increased, for these institutions will be induced to buy the choice paper formerly purchased by the New York banks, procuring the funds through rediscounts.

Rediscounting Will Grow in Favor.—However, we must remember that bankers are proverbially cautious men, and it is likely that the practice of rediscounting will be resorted to slowly and with great caution. Until more is known concerning the exact geographical limits and the number of the reserve banks, it is impossible to tell to what extent each particular bank will find a demand for funds through rediscounts by their members. Should the practice of rediscounting become popular, it is inevitable that it will shift the secondary reserve of the banks from call loans to commercial paper. There is no market at present for call loans in time of stress. But if the reserve banks should prove to be strong, in the sense that they have large resources and are able to take care of the needs of their members, a feeling of security will inevitably develop. It was, therefore, the consensus of opinion of the great majority of the bankers who expressed themselves before the Congressional committees that as the years go on the desirability of commercial paper as a banking asset will steadily increase, while at the same time the rating of the collateral or call loan will correspondingly diminish in favor.

Objections of Borrowers Considered.—Considerable attention was given by bankers, in their analysis of the bill while it was before Congress, to the practical working out of the business of rediscounting. Many bankers were strongly of the opinion that business men would not take kindly to having their notes rediscounted with a Federal reserve bank with which they had no business relations, and which was, perhaps, situated at a considerable distance. This objection was made very emphatically concerning the farmers, who, it was stated, would look with great disfavor upon the sale of their notes to another bank. Country bankers gave this objection as one of the reasons

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why they preferred to borrow upon the bank's note rather than rediscount.

Presuming that when a note which a Federal reserve bank has rediscounted for a customer of one of its member banks comes due, the reserve bank will use the member bank in question as a collection agency in much the same manner as banks now collect notes for each other, the customary procedure will be, in substance, as follows: The note will either be sent by mail to the member bank several days before it is due, the proceeds of the note being charged, at the time the note is sent, to the account of the member bank to which it is transmitted, or the note sent for collection. If the customer should desire to take up his note prior to the time of its maturity, he might raise an objection upon finding that it was no longer in the hands of his bank, it having been rediscounted with a reserve bank. In that event, several days might elapse before the member bank could secure its return.

Rediscounting to Secure Notes.—When the reserve bank has used the paper rediscounted by the member institution as collateral for the issue of Federal reserve notes, additional complications will develop. The law specifies that in such instances the commercial paper rediscounted and used as the basis of security for the Federal reserve notes shall be turned over to the Federal reserve agent in charge of that particular reserve bank, and held by him separate and apart from the bank's assets. The Act, however, further provides that "Any Federal reserve bank may at its discretion withdraw collateral deposited with the local Federal reserve agent for the protection of its Federal reserve notes deposited with it, and shall at the same time substitute therefor other like collateral of equal amount with the approval of the Federal reserve agent under regulations to be prescribed by the Federal Reserve Board." Under this provision it will be possible for a member bank to secure the return of the note of a customer desiring to take it up before maturity or to arrange that the note shall be returned to it and be in its possession at the time when

it matures. In all likelihood the business man will have no difficulty because of the fact that his paper will be rediscounted. In case he does not desire to pay the note before it matures, he will have no knowledge of the fact that his note has been rediscounted, except that the note, when paid and returned to him, will bear the endorsement which was put upon it by the member bank as a means of procuring its rediscount by the Federal reserve bank.

Difficulties with Renewed Paper.—Another complication which may arise is in the handling of commercial paper which is renewed in whole or in part. Country bankers have pointed out that in many cases farmers can not pay their notes upon the exact day when they fall due. There are many things which may delay the receipt of anticipated funds, such as wet weather, delayed harvesting and marketing of grain, bad roads, etc., and often while a loan is perfectly good, it may not be paid until some days after maturity. It would be difficult, if not impossible, to "jog the farmer out of his regular rut," and he would resent vigorously any attempt on the part of the bank to compel him to pay promptly upon the day when his note falls due. If his notes were held by the reserve bank, it would be necessary to charge them back against the member bank when due, returning them with the daily collections. It would be very difficult for the Federal reserve bank, under such circumstances, to form an intelligent judgment of the extent to which commercial paper was being taken up at maturity. Some idea of the conditions surrounding farmers' loans can be secured from the computation made by Taylor Vinson, Esq., a lawyer of Huntingdon, West Virginia, who found that "Generally speaking, about forty per cent of the loans made by banks in the community were paid promptly upon maturity, the balance being renewed."

If we can accept Mr. Vinson's conclusions as typical of conditions throughout the agricultural districts, it would appear that the greater amount of the commercial paper rediscounted with a Federal reserve bank would not be paid upon maturity. While in all probability a renewal note

would not be sent forward immediately to the reserve bank (because of the fact that the renewal might run for a period exceeding ninety days) yet the volume of commercial paper would not be contracted, for the renewal note would be held in the portfolios of the bank. Some of the witnesses before the Senate and House committees contended that the assets which would stand behind the Federal reserve notes were not as liquid as would appear upon the surface. The real reliance for a contraction in the amount of Federal reserve notes which may be issued from time to time, is placed in the fact that when the demand for additional funds ceases, the notes will be retired through the taking up of the commercial paper which has been rediscounted with the Federal reserve bank. Should it transpire that a large proportion of commercial paper rediscounted is renewed again and again, then the expected contraction of the circulating medium will not occur.

Influences Forcing Contraction.—Mr. Sol Wexler voiced the sentiment of the majority of bankers who have discussed this feature when he said that there was no real danger because the Federal discounting bank would get its money in any event. The member bank discounting it "having endorsed the paper, even though it had to renew the note to John Smith which had matured in ninety days and was not paid, would go over to the central or regional bank and take up that note. In a week afterwards it might come and bring John Smith's new ninety-day note and rediscount it, but in the meantime the government, if you have a government bank, or the central reserve bank or the regional bank would have its money, and there would be nothing to prevent it from getting its money." He declared that the renewal of a note was a voluntary matter on the part of the bank, and that his banking experience had shown that if the bank was firm in its demand that the note be paid, the merchant or business man would do so, even though "he may have to make sacrifices. He may have to sell commodities or securities or whatever he may have, but he meets it, because his whole future and com-

mercial standing depend upon meeting it. He does not know who holds his note or to whom to go to get extension."

Mr. Charles A. Conant, of New York City, agreeing with Mr. Wexler's conclusions, added "that even though you have a substratum of paper which is not readily convertible to meet a demand for a great many outstanding notes, you have a margin which is convertible. If you choose you can say to your better class of clients who apply for renewal, 'I will renew for seventy-five per cent of your note,' the result is that the bank is able to convert at least part of its assets into cash, to meet the pressure of withdrawals of deposits, if they occur, and to swell metallic resources if it has demands for loans." He said that he thought that American commercial paper "ought to be more liquid than it is, but there is no serious risk if we have a margin supply which is liquid, and if we have a method by which the banks can rediscount with the marginal supply as a means of accommodating their depositors."

These conclusions are fortified by the experience of the banks in the panic of 1907. In those distressing times every merchant's calculations were upset by the fact that his anticipated collections did not materialize. Nevertheless it was true that nearly every dollar of the short time commercial paper which had been put out through note brokers, and which aggregated an enormous total, was paid promptly.

The Responsibility is on the Bankers.—One of the arguments which can be advanced in favor of bankers' control of the Federal reserve banks arises in connection with the point that paper will be indefinitely renewed and not retired when business prudence demands that it should be paid. The majority of the directors of the Federal reserve banks will be elected by the member banks, and will presumably reflect the general sentiment among the member banks. When the consensus of opinion among the member banks is clear that contraction in commercial loans should occur, the directors whom they have elected can force the contraction. They can require the member banks to reduce

the amount of their discounts by positive limitations, or they can accomplish the same purpose through a change in the rate of interest on rediscounts, in a manner which will be developed in a later chapter. If there is an expansion of credit, it must occur through the lack of judgment on the part of most of the bankers of the country. Moreover we must recollect that the Federal Reserve Board can discipline any reserve bank which has taken too liberal a policy in rediscounting.

Branches Will Aid in Rediscounting.—A very compelling argument in support of the regional system is the great facility which regional banks provide for the rediscount of paper. The Aldrich plan, it will be remembered, created a central institution with fifteen branches. It practically recognized the necessity of the regional banks for rediscount purposes by providing regional boards of directors which should manage the fifteen branches, and which should pass upon the rediscounts offered by the constituent banks. In so far as the work of rediscounting is concerned, there were no advantages secured by the Aldrich plan which will not be found in the Federal Reserve Act. We will omit at this point any discussion covering the extent of the control which will be exercised by the Federal Reserve Board as contrasted by that which could be exercised by the Central Reserve Association under the Aldrich plan. Both plans recognize that it would be impossible to work out a satisfactory system of rediscount through a central bank with only one place of business, for it would be too far distant from the member banks. The time required to transmit commercial paper between the member banks and the central institution would be almost fatal to the successful operation of the plan.

CHAPTER XI

FOREIGN ACCEPTANCES

Why the Act Permits Acceptances.—Section 13 of the Federal Reserve Act, defining the powers of the reserve banks, provides, in part, that "Any member bank may accept drafts or bills of exchange drawn upon it and growing out of transactions involving the importation or exportation of goods having not more than six months' sight to run; but no bank shall accept such bills to an amount equal at any one time in the aggregate to more than one-half its paid-up capital stock and surplus."

The purpose of this section is to create an acceptance market in this country similar to that which exists in Europe and which has been of the greatest value in assisting European merchants to develop their foreign commerce.

At the present time almost all of the business of Central America and South America with foreign nations is done upon acceptances. Our merchants are placed under a severe financial handicap in competition with foreigners, because our bankers can not extend to them terms as favorable as those which their rivals procure. This section was inserted in the Act as a remedy.

Foreign Practice.—Bank acceptances have heretofore been illegal under the judicial interpretation of the National and State Banking Acts. A bank acceptance is the same as the acceptance of a draft by a merchant in domestic exchange operations. The procedure abroad is, in brief, as follows: A merchant who is not well known, or whose paper is not salable on his own credit, goes to what is known as an "acceptance house." Although some of the banks act as acceptors, most of the business is done by institutions that are not primarily banks as the word is used in this country. They were originally great commercial houses which added banking functions to their business because of the profits

which they could secure through their prominence as merchants. The foreign acceptance houses developed from firms which compare roughly with such firms in this country as John Wanamaker or Marshall, Field & Company, which do an enormous importing business, and which, through a long period of time, have built up for themselves an international reputation and a very high credit rating abroad. There are many houses of this character in London, Berlin and the other European financial and commercial centers. Gradually such firms were importuned to lend their credit to less widely known merchants who desired to finance the importation of goods. As the opportunities for profits through so doing developed, these houses became almost, if not actually, banking institutions. They have confined their business, however, almost entirely to the accepting of drafts. They are not banks of deposit. They do not issue notes, they do not discount paper and they meet demands, not with cash, but with checks on banks.

Borrowing on an Acceptance.—A merchant whose credit is not known in the country in which he desires to make purchases will go to an acceptance house and will arrange with it to give him a letter of credit for say £10,000. The acceptance house, after carefully investigating the man and satisfying itself as to his responsibility, will, for a commission, grant him the privilege of having bills of exchange drawn upon them, which they accept when presented. They will write across the face of the bill the word "accepted" and affix thereto their firm signature, just as a merchant in this country does with a domestic time draft.

This accepted draft thereby becomes two or three name paper, as the case may be, and when the accepting house is of the first rank, has the highest rating in European financial circles. The drafts are purchased by recognized discount houses. Great corporations like the London City and Midland Bank and the Discount Bank of London make a practice of buying accepted bills and commercial paper in the open market.

The Practice an Old One.—It must be borne in mind that this very admirable system of financing foreign trade is the outgrowth of centuries, and is the direct result of the development of the acceptance houses and of an immense foreign trade which gives them a tremendous field for their business. It has proved impossible to duplicate the system in this country, because we have no great galaxy of importing houses of the character existing abroad. But even if we can not duplicate the foreign system, we may secure the same benefits if we adapt our banking institutions in such a manner as will enable them to create paper of equal safety and desirability as that which exists abroad. This the Federal Reserve Act attempts to do.

The Act, it will be observed, limits the privilege of acceptance to bills arising in the foreign trade. At one stage of the discussion it was proposed to grant the privilege of accepting domestic bills or drafts; but so great was the opposition from the bankers, and so cogent were their arguments against this feature, that it was dropped out of the law.

The acceptance of a bill is, in reality, a loan on the bank's endorsement for one of its customers, the bank guaranteeing that the draft will be paid by the customer when due, which may be several months from the date of the acceptance. The inauguration of such a practice marks a radical departure in American banking methods.

Different Ways of Using Acceptances.—Acceptances are given by European banks and bankers in connection with two kinds of drafts—the documentary bill and the commercial credit bill—to finance importations and exportation of merchandise and commodities. Of these the documentary bill is probably the most important. If an American merchant desires to purchase coffee in Brazil he will probably finance it by arranging for a documentary credit in London, by which the London banker will agree to accept a three-months bill drawn on the London bank by the Brazilian shipper. Attached thereto will be the bill

of lading, insurance policies, etc., covering the shipment of coffee. The face of the bill will call for the amount of the purchase price of the coffee, plus such charges as the shipper might incur in behalf of his customer. The Brazilian shipper, in all probability, will sell this bill to his local bank, which will buy it without hesitation because it is drawn on a first-class European banking house whose credit, as a result of years of business, has been thoroughly established. The bill or draft is accompanied by an order bill of lading. If the Brazilian bank doubts that the shipper has the right to draw upon the European banking house, it will demand that the exporter produce the letter of credit against which the bill is drawn, which is, in substance, an official authorization issued by an American bank, entitling the purchaser of the coffee to draw upon the London bank up to a certain stipulated sum, the London bank to charge this amount to the account of the American bank. The bill purchased by the Brazilian bank is one of its choicest investments. After acceptance by the London bank upon which it is drawn, it may be sold in England or on the Continent. Because of the extensive demand for such bills, it is certain to be discounted without hesitation. Often such bills are discounted with one of the Brazilian bank's correspondents, thereby enabling it to secure indirectly a credit which is equivalent to cash upon the books of its foreign correspondent. If the Brazilian bank prefers to do so, it can definitely determine, in advance, the profit which it will make on the transaction by cabling to Europe and ascertaining the discount which will be charged for converting the bill into cash when it arrives in Europe.

Details of Financing Imports with an Acceptance.—After the bill has been purchased by the Brazilian bank, it is immediately mailed to Europe and in due course is presented to the bank upon which it is drawn, which accepts it, and thereby obligates itself to pay the bill when due. The accompanying documents are left with the accepting bank, and, in the case which we have supposed, would probably be sent by it to the American banker by whom the letter was

originally issued. This bank, upon the arrival of the coffee, would deliver the bill of lading to the American importer only upon such terms as may be agreed upon. The American bank must furnish funds to the London bank before the accepted draft falls due, and prior to that date must secure this sum, plus a commission, from the importer. The banks have been protected thus far by the bill of lading and this, or a warehouse receipt if the goods are already at hand, will be surrendered without formality if the importer's credit is unusually good, or only upon the payment of the cash if his rating is very poor. The most common practice, however, is to require him to sign a trust receipt, by whose terms he binds himself to hold the goods in trust and deliver to the bank the proceeds of his sales as they are received.

This method is the one employed to finance a very large proportion of our importations of merchandise, especially of raw materials. The American banker arranges for the acceptances at a foreign bank, because he finds that shippers and wholesale houses in China, South America or Europe will not, as a rule, readily take the obligation of an American private bank. The American bill has not as ready a market as the London bill, because the American banks are not so widely and so favorably known as the large London banks and accepting houses, and also because the amount and direction of our foreign trade do not create a demand for American exchange. Countries that do not have large imports from the United States have little need for accounts with banks here.

Commercial Credit Bills.—Following the documentary bill in importance is the two or three months' bill, drawn on a bank or banker, constituting commercial credit granted by the bank to its customer. The arrangement underlying such a bill is comparatively simple. The European banker allows his customer, who may be importing goods from America, to have drafts drawn on the European bank at two or three months' sight, the customer agreeing that he will place funds in the bank several days before the bill

falls due. If the agreement is faithfully carried out the bank will not have to put up any cash, merely placing its endorsement on the paper of its customer. In some cases an arrangement is made with the bank by which the bill may be renewed at maturity. The majority of these commercial credit bills are drawn without collateral; where collateral is given, it frequently consists of the pledge of the merchant's bills receivable, or of collateral securities.

Commercial credit bills, however, in point of importance are insignificant as compared with the volume of documentary bills handled. As a general rule, English bankers avoid accepting long bills for local customers who are accommodated by cash advances. The greater proportion of acceptances are for out-of-town customers. While there is no absolute rule, yet it may be said that the joint stock banks of England accept only against collateral; while many important private banking firms and banks, which often make accepting their exclusive business, grant uncovered credits to a very large extent. This sharp classification does not exist in France or Germany, where the sort of credit granted is controlled apparently only by the facts in each particular case, and not in accordance with a general rule.

American Practice.—As contrasted with the European methods of financing foreign trade, our methods are very defective. It is difficult, if not impossible, to give any adequate brief description of the methods of financing American trade, for the reason that the exact arrangement differs widely with various classes of business. In the export trade, for example, different commodities are handled in accordance with special customs which have grown up around them, partly as the result of trade conditions and partly because of the nature of the commodity. In the exportation of grain the seller will draw at sixty days' sight upon the foreign buyer, instead of under a bank credit. Such drafts, with the bills of lading and such other documents as are necessary attached, are purchased by American bankers and forwarded by them to their European correspondents. In all probability the draft is originally purchased by an

interior bank, which forwards it to some New York institution to which the draft is, in substance, re-sold. The American banker, generally in New York, is obliged to advance the money on such paper, unless he draws his own time bills against them until such time as they are rebated. With grain bills, the average time of rebating is around fifty-six days, which places the American bank in possession of demand foreign exchange against which it can draw in order to reimburse itself, with the loss of a very few days' interest.

Financing Our Exports of Cotton.—Cotton, when exported from the United States, is financed in a comparatively simple manner. The cotton importer, or buyer, arranges with a London bank, for example, to accept drafts drawn against it up to a certain amount. When this is done, the foreign cotton buyer makes arrangements with certain dealers to cable him offers of cotton. If the offers seem attractive they are accepted by cablegram, in which is stated, for the benefit of the American seller, the name of the foreign bank on which the drafts of the seller are to be drawn. The American seller ships the cotton to the foreign buyer under bills of lading drawn to the order of the American shipper, and endorsed by them in blank. These bills of lading are attached to drafts drawn upon the bank designated in the cablegram. The draft is usually at sixty or ninety days.

This exchange is then handled in one of two ways: First, it may be sold to a local bank, say in New Orleans. The course of the transaction from this point on, should this alternative be selected, was described by Mr. Wexler before the House Committee as follows:

“ We remit these bills as we buy them—maybe a million or a million and a half a week—to Europe; and we sell against them checks payable on demand at sight in New York, against the balances which our remittance abroad has created. When we sell them in New York we receive credit in New York. That money may remain there a day, or it may remain there a week,

or it may remain there a month. We check against it in the ordinary course of business. That money is lying in New York and should pay a reasonable rate of interest, say two per cent. In turn, when a bank in the interior, say at Mobile, where we have a number of bank accounts, gets exchange upon New Orleans, they send that over to us and receive credit for it, and they check against it in the ordinary course of business; and as long as they are receiving a small rate of interest on it there is no great tendency for the bank to force its money out. They can better afford to wait until the business offered them is entirely satisfactory, because they are getting a small remuneration upon it while it remains in the hands of the other banks."

If the cotton bills are not sold to a southern bank in the manner just described, they are in all probability sold in New York to some financial institution, such as the Guaranty Trust Company, which makes a business of buying these bills. They are forwarded by the purchasing New York bank to its London correspondent, and against the credit thereby built up, exchange on London may be sold.

Financing Our Imports.—As regards the import trade, it is almost impossible to set forth any typical transaction. Trade conditions differ widely; and to add still further to the complexity of the problem, the methods of financing transactions differ to a very considerable degree as between the several countries of the world, and even between the large cities of many countries. The transaction heretofore outlined concerning the importation of coffee is fairly typical of the method followed in financing the importation of a large proportion of the raw materials coming to us from abroad. American importers buy, in the great majority of cases, on commercial letters of credit issued by London banks, which have been procured by the American importer through his local American bank. The American institution, acting as agent for the foreign bank, will sell him the letter of credit. Armed with such a credit, the American

manufacturer is able to buy goods on a cash basis; for the foreign exporters and wholesalers have absolute confidence in the London house which is obligated by the letter of credit and know that they will be able to dispose of the bill of exchange drawn against that credit, because of the high standing of the European bank.

Disadvantages of our Methods.—From the stand-point of the American banker, however, the transaction is far from satisfactory. The letter of credit is sold on the basis of sterling exchange, that is to say, it entitles the bearer to draw drafts up to a stated number of pounds sterling, and the draft or bill of exchange, when drawn, reads in pounds sterling. To the American firm, this introduces an unfamiliar element which is vexatious, and also carries with it certain disadvantages. Of far greater importance to the banker, however, is the fact that in selling the letter of credit he gets for himself only one-half of the commission charged the customer, the balance going to the European bank whose name and credit are being used, whereas the American bank is assuming all the risk. The American banker feels that if he can sell his own draft, he would get the entire commission, and that thereby his profits would be at least doubled with existing rates. He can not do so, however, because, as we have seen, the name of the American banker is not known and such drafts can not be advantageously negotiated by European exporters in the discount markets of England, France and Germany. The American importer, therefore, insists upon a sterling draft because of the better terms that he can drive with it in his bargain with the exporter. The demand for the privilege of accepting foreign bills is prompted, to a large degree, by the desire of the American banker to secure the entire commission, rather than pay half of it to his European correspondent.

Rediscounting and Accepting not Favored.—Heretofore it has been considered the height of bad banking for an American institution to endorse the paper of a firm where it was not absolutely necessary in the conduct of the bank's business. This has been the chief objection to discounts.

If rediscounting is bad practice, accepting is much worse; for in the first case the bank gains a positive advantage through converting a note into cash, while, in the second, the only thing which would justify the practice is the comparatively small commission,—in Europe ranging from one-fourth to one-half of one per cent,—which the bank would receive for lending its credit to merchants. The bank doing an acceptance business becomes, in substance, a professional endorser. Of course, it must not be inferred that the bank takes a large risk when the business has been intelligently managed. The very smallness of the commission shows how slight is the risk.

Limitations in the New Law.—It will be noted that the Federal Reserve Act limits the amount of acceptances upon which the bank may assume obligation to an amount equal, in the aggregate, to not more than one-half of its paid-up capital stock and surplus. This restriction was prompted by the demands of safety; the American banker has had no experience in the acceptance business, and even after every allowance is made for his acumen, caution and skill, the framers of the law felt that this new kind of banking business should be inaugurated cautiously. This limitation, however, will not very much restrict the extent to which such a business can be developed.

The National City Bank of New York, the largest bank in the United States, with deposits of almost \$200,000,000, has an aggregate capital and surplus of \$50,000,000. According to the limitation imposed by the Reserve Act, the National City Bank could not have outstanding acceptances aggregating over \$25,000,000. While it can not be definitely stated, yet it is very probable that the average period of paper which will be accepted by the National City Bank will be about sixty days. Upon this basis, the aggregate amount of exchange which the National City Bank could accept in a year would be \$150,000,000. It is very unlikely that any single institution would have the opportunity to do a larger business than this. Certainly, at least, it would

take many years for the National City Bank to build up an acceptance business of this volume.

Development of Accepting in the United States.—The general sentiment of the bankers of the country who appeared before the Congressional committees was that the foreign acceptance business will not immediately have a large development. Mr. Sol Wexler, Vice-President of the Whitney Central National Bank of New Orleans, an institution dealing very largely in foreign exchange, favored the granting of the privilege of acceptance to the American bankers in order that we may be in a position to compete, if possible, with foreign institutions in financing our foreign trade. He said: "I think we should be permitted to do that business. I think it would be desirable to build up in this country an acceptance business as has been done in Europe. It would give two- or three-name paper which we have not got to-day." Mr. Wexler believes, however, that the inauguration of the business should be done very cautiously.

Mr. Andrew J. Frame, President of the Waukesha National Bank, Waukesha, Wisconsin, in his prepared statement before the House Committee, stated:

"Giving 7,400 national banks the right to expand their credit, as now authorized, to the limit of their assets; then loan their credit by accepting customers' time drafts on them; then permitting those customers to peddle such acceptances in any money market, is entirely unnecessary and also a dangerous proposition. This is brokerage and not legitimate banking and should be confined to acceptance or discount houses making it their business, and not to 7,400 banks of deposit.

"When we find in the Comptroller of the Currency reports for 1912 that the total 'loans and discounts' including other securities, except United States bonds, of all the banks of the United States approximate \$18,500,000,000, divided about as follows, to wit:

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In various classes of bonds, etc., excluding United States bonds		
States bonds		\$4,500,000,000
Real estate loans and mortgages		3,500,000,000
Demand and time loans with various collateral and single or firm paper, unsecured		6,000,000,000
Live commercial paper, say		4,500,000,000
Total		\$18,500,000,000

we are led to exclaim, with nearly one-half of the total bank loans in long-time bonds and mortgages; with nearly one-third in various non-quick liquid assets; and only one-quarter of it, which is promptly cared for, in live commercial paper, including shipments with bill of lading attached, why should the air be surcharged with plans to manufacture acceptances in order to create a discount market for idle funds? We think the proposition absurd. The only way to create legitimately a larger discount market is to enlarge our internal and external commerce; expand by hook or crook this external commerce, not indirectly as now done largely through London, but through direct shipments to and from the world's ports. When this is accomplished, American international banking will pulsate quickly throughout the world, thus turning trade and profits from London, Paris, Berlin, etc., to American ports; we must also accumulate surplus capital to compete with European low interest rates so that our live bill-of-lading paper does not automatically go abroad. There is no other sound cure. Fictitious manipulation through internal manufactured acceptances simply spells bubble blowing."

Mr. Frame's criticism, however, was based largely upon the proposition to allow member banks to accept domestic drafts. This proposal was almost universally condemned by bankers, and was stricken from the bill by the Senate Committee. Mr. Frame believes that "a live acceptance with a bill of lading attached for export abroad is a perfectly legitimate loan, and I say it is taken care of now; therefore, when you come to the question of saying that you

can manufacture a lot of acceptances to create a discount market, I say it is practically impossible to do it."

Opinions of Leading Bankers.—Practically every banker who appeared before the committee in the matter of acceptances agreed with the latter part of Mr. Frame's statement that we can not build up an acceptance market simply by legalizing the practice. If the American banks are to have a large acceptance business, it must be as the result of the development of a large foreign trade to be financed. The acceptance business is the result of the trade. In addition, it is difficult to see how American bankers can make much headway in developing their acceptance business until they can succeed in establishing a ready market for the paper which they have accepted in the discount markets of Europe. If European buyers of commercial paper continue to look with relative disfavor upon it, as they have done in the past, then it will be difficult, if not impossible, to get American importers to take "dollar drafts" and to arrange to finance their transactions entirely through their American banks rather than to follow their present method. It is very probable that, as time goes on, certain American banks will establish a high credit rating abroad and their acceptances will sell readily. To what extent this will be true is a matter which can not be foretold. In any event, one thing is certain: the great rank and file of the banks of the United States can never take advantage of the new privilege of accepting foreign bills, for they do no business which would give rise to such transactions. The banks which will build up an acceptance business are comparatively few in number. They will be institutions situated in New York, Philadelphia, Boston, Chicago and other centers in which foreign trade is carried on. To them, the right of accepting is an advantage; but as to how great the practical benefit will be, it is impossible to make any intelligent prediction.

Accepting as an Aid to Our Foreign Trade.—There is another side to the question of foreign acceptances which deserves a moment's consideration. If the American bankers succeed in developing an acceptance business, will

this be of assistance to the American firms in the development of foreign import and export trade? The following excerpt from the report of Archibald J. Wolfe on "Foreign Credits," published by the United States Department of Commerce and Labor, is interesting as bearing upon this matter:

"Is the American Manufacturer at a Disadvantage?

"The question whether the American manufacturer is or is not at a disadvantage in discounting his bills on foreign countries, as compared with the German and the British manufacturers, is a difficult one to answer by "yes" or "no." When reference is made to individual transactions, it will be found that an American manufacturer of standing will have no trouble in having his ordinary bills on most foreign countries discounted by American bankers, or the New York agents of foreign banks, or he has the choice of sending his bills for collection to the banks located in foreign points; and it is apparent that in either case the cost of the transaction to him is no greater than to the German or to the British shippers. It is in the general system of financing foreign shipments, as described in the chapters on German and British methods, that the Europeans have the advantage. The elastic system which permits banks to accept bills drawn on them by their customers, who can have these bills rediscounted, the existence in Germany and in England of authoritative institutions laying down the discount and loan rates which automatically guide the entire banking system in its dealings with individual clients, and finally the presence of an open discount market which permits bankers to employ funds in the purchase of bankers' and prime merchants' bills and to rediscount the same when cash funds are needed—these are among the principal aids to a freer system of financing the foreign business than that prevailing in the United States. In the United States paper discounted for a

bank's customers is held until maturity and is so much dead weight in the bank's vaults, the operations being, therefore, necessarily restricted; in fact, it is only because American bankers are able to discount bills purchased from American exporters in the foreign money markets that they are at all in a position to negotiate such bills for their customers.

"In the scope of this report banking may be commented upon only to the extent of entering into the question of financing foreign shipments. Yet one feature of the proposed improvements in our banking system can not be left undiscussed. We are advised to start banks in foreign countries. The vast importance to German commerce of the many German banks in Latin America and in the Far East is readily admitted. There are, however, important drawbacks in such undertakings. Banks alone can not create trade. France has numerous bank agencies in Russia, while Germany has practically none, and yet Germany dominates the trade of Russia. If we had a chain of banks in Latin America, would they be employed for banking transactions with Latin America or in Latin America? What disastrous effect might not the failure of such a branch, due to some local causes, have upon the mother bank in the United States? It seems that far the better plan might be to create connections by taking an interest in existing Latin-American banks. The risk would be limited only to the amount invested, and practically every other benefit of American-owned banks abroad would be secured."

CHAPTER XII

RETIRING THE NATIONAL BANK NOTES

The National Bank Notes Unsatisfactory.—One of the most difficult of the problems to be solved by the new banking law is the question of note issues. Our national bank notes, for reasons explained earlier in this volume, have been unsatisfactory. Although entirely safe they have been inelastic, increasing and decreasing in amount not with the needs of business, but with fluctuations in the price of the United States bonds with which they are secured. Their subordination has clearly been one of the essentials in any plan for reform, and must, of course, be accompanied by the introduction of a new and more satisfactory note.

These Notes Hard to Eliminate.—The double problem of retiring the old notes and of substituting new ones that will be more satisfactory has been harder to solve than almost any other. The present notes are a definite part of our monetary supply in the hands of the people and in the vaults of some of the banks, especially the State institutions. A sudden withdrawal of them would mean a shrinkage of approximately \$750,000,000 in our supply of money, which would cause serious inconvenience and even great hardship to those who would suffer from the scarcity of ready cash and the resulting contraction of credit that is now based on that cash. Moreover, the bonds securing those notes have been purchased by the banks from time to time, over a long period of years. High prices have been paid for many of them, not because of their value for ordinary investment purposes, but because each bank was required (1) before commencing business to buy and deposit in trust with the United States Treasurer at Washington an amount of these bonds that bore a definite relation to the amount of its capital, and (2) to add to this deposit at Washington an amount sufficient to make the total equal

to the amount of the circulating notes it might decide to issue. These requirements have been such a stimulus to the demand for the bonds that their prices have risen much higher than would otherwise have been the case. For some time past there has been a decline in bond quotations, and a sudden retirement of the national bank notes would mean a further very sharp drop and a consequent heavy loss to the national banks. Inasmuch as the government has required the purchase of many of them, and has made the purchase of the rest a prerequisite to the issue of circulation, Congress was bound to make some provision against such a heavy loss.

Any legislation that might be enacted governing the issue of a new kind of note involved two considerations. First, the subordination of the old national bank notes and the substitution for them of a new supply of money which shall be a somewhat permanent part of the circulation; and, second, the issue of other notes whose supply shall be elastic, varying with the fluctuations in the demands of business. We shall examine these two problems in order.

The Need for a Circulating Medium.—Before analyzing the provisions of the new act several rather fundamental considerations must be made clear. There is a certain amount of money that is always necessary for the daily needs of business. There are fluctuations in this amount, but there is a minimum below which our needs for bank reserves and for a circulating medium can not fall. Professor O. M. W. Sprague, in his testimony before the United States Senate Committee on Banking and Currency, considered that from \$1,200,000,000 to \$1,500,000,000 is permanently needed by the people of the United States as a circulating medium, entirely aside from the amounts held in the vaults of the banks.

On December 1, 1913, we had in the United States \$3,767,082,704, of which \$332,832,915 was held in the Treasury as assets of the government, and the balance, or \$3,434,249,789, was in the banks or in the hands of the public. To this supply of money the business of the country was ad-

justed. Any considerable increase or decrease would be felt, perhaps injuriously. Of this total the greenbacks and the silver dollars are absolutely fixed in amount. Silver certificates, of course, merely represent silver dollars and fluctuate inversely with them. Subsidiary silver is of minor importance, as are also the Treasury notes of 1890. Gold, and the gold certificates, may change in amount because of a greater output of gold from the mines, and through imports and exports, but the great mass of it is a permanent part of our circulation. In brief, no increase in any of these other forms of money could readily or wisely be provided to take the place of our \$757,159,472 national bank notes should they be withdrawn. Yet their place must be filled unless we expect business to readjust itself somewhat violently to a changed supply of money. This substitution should be accomplished in such manner as to avoid heavy losses to the national banks through a fall in the value of their United States bonds.

Many different plans have been proposed. Perhaps some of them were better than the one finally adopted, but this is not the place for comparisons. A definite program has been decided upon by Congress and on this our attention must be concentrated. The plan will be stated briefly, followed by a discussion of its effects upon the Federal reserve banks and upon the national banks.

National Banks May Continue to Issue Notes.—The Federal Reserve Act does not compel the national banks to retire their outstanding circulation. They may increase it or decrease it under the old regulations and within the old limits, if they see fit. Moreover, they are released by Section 17 of the Act from the old requirement to purchase a stated amount of United States bonds before being authorized to commence the banking business.

Retiring the National Bank Notes.—The first important change is that, beginning two years after the passage of the Act, that is to say on December 23, 1915, member banks may retire their circulation in whole or in part, this

privilege to remain open for a period of twenty years thereafter, or until December 23, 1935. Any member bank desiring to retire any or all of its circulating notes may file with the Treasurer of the United States an application to sell for its account, at par and accrued interest, its United States bonds, now held in trust at Washington against the circulation that is to be retired. Such application should be filed at least ten days before the end of each quarterly period in order to secure prompt action. If this condition is not observed, the application will not be acted upon until the end of the next quarterly period.

At the end of each quarterly period—March 31, June 30, October 31 and December 31—the Treasurer shall furnish a list of such applications to the Federal Reserve Board, which may, at its discretion, require the Federal reserve banks to purchase these bonds at par and accrued interest. Each reserve bank shall have allotted to it by the Reserve Board such proportion of the bonds as its capital and surplus bear to the aggregate capital and surplus of all the reserve banks.

Disposition of the United States Bonds.—The Treasurer shall notify the member banks of the amount of bonds sold for their account and these banks shall then assign and transfer the bonds to the reserve bank that has purchased them. The reserve banks shall then deposit lawful money with the Treasurer of the United States for the purchase of the bonds. The Treasurer shall deduct from this payment an amount sufficient to redeem the outstanding national bank notes that have in the past been secured by those bonds, and shall pay the balance, if any remains, to the member bank that formerly owned them.

Advantages of the Plan.—From the standpoint of the national bank this arrangement has one advantage and several disadvantages. The advantage is that the bonds it now holds may be sold at par. Most of them pay only two per cent and yield even less on the basis of the purchase price, since they were purchased at a considerable premium.

The market price has for several months past been below par and this provision in the Act may strengthen the market.

Objectionable Features.—On the other hand, there are several disadvantages. In the first place, no provision is made for non-member national banks. If they wish to retire their circulation they must do it as in the past. Since national banks must become members by December 23, 1914, or forfeit their charters, failure to enter the system involves the necessity of depositing lawful money at Washington for the redemption of their circulation. This step would leave them with the bonds on their hands to dispose of in the best way possible. The offering of any considerable number would seriously break the market. A suggestion of how serious this might be is to be found in the fact that British two and one-half per cent consols are, at the time of this writing, worth about 72, and French three per cent rentes, 86. Our own Panama three per cent bonds, which are not available to secure circulation, are selling at about par. Over ninety per cent of our national bank notes are secured by two per cent bonds, and just how low the market for these would fall, if many were offered, is a matter for conjecture. In view of the tendency to urge the banks to join the system, it seems improbable that the Treasury Department would take any definite steps to support the market, merely to prevent loss to those banks that are unwilling to enter.

Retirement Will Be Slow.—Another disadvantage in the arrangement is that the inauguration of the plan for retirement is delayed until December 23, 1915. Any bank that wishes or is compelled to retire its circulation prior to that time must dispose of its bonds in the market at the current quotations. Besides, the retirement can not be very rapid even after it has started. The reserve banks are not allowed to purchase more than \$25,000,000 of these bonds in any one year, and even this amount may be reduced if they choose to purchase bonds under the authorization in Section 4, which will be explained in the next chapter.

There were outstanding on December 26, 1913, \$756,-

944,194 of national bank notes, against which were held \$16,147,911 of lawful money and \$743,173,000 of United States bonds. If all the national banks make application regularly and the full \$25,000,000 be taken over by the Federal reserve banks each year, the process will take nearly thirty years. Any bank liquidating its affairs in the interval will be compelled to dispose of its bonds in the market and assume any resulting loss. This could be obviated if the Reserve Board should give preference to such banks under the plan for retiring the national bank notes. No instructions are given in the Act to guide the Reserve Board in the amount it must require the reserve banks to purchase from any particular national bank. It seems probable that if more than \$25,000,000 be offered in any one year, or one-fourth of that sum in any one quarter of the year, the board will allow each bank making application to retire an amount to be determined by the ratio between its application and the total applications received, or will in some other way work out the problem on a pro rata basis.

Complete Retirement not Provided For.—But this is not all. The Act specifically limits the retirement process to a period of twenty years. Since, as we have seen, it would take nearly thirty years, at the rate of \$25,000,000 a year, to retire all the outstanding notes, each bank would be left at the end of that long period with approximately one-third of its bonds still on hand. If we deduct the three per cent and four per cent United States bonds now held in trust, and limit ourselves to the two per cent bonds, which amount to \$685,996,700, the retirement of all of them would take over twenty-seven years and the banks would be left with at least \$185,996,700 unprovided for.

Profits on Note Issues.—This assumes that the national banks will wish to retire their outstanding circulation, and such an assumption may be entirely false. The Comptroller of the Currency and others have worked out a formula by which to determine the profits to national banks in issuing circulating notes. If the circulation is based on the deposit of \$100,000 of United States consols of 1930

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purchased at \$101,255 (the market price in October, 1912) the gross receipts, the expenses and the net profit would be as follows:

Cost of bonds	\$101,255.00
Circulation obtainable	100,000.00
<i>Receipts</i>	
Interest on bonds	\$2,000.00
Interest on circulation at 6 per cent.....	6,000.00
Gross receipts	\$8,000.00
<i>Deductions</i>	
Tax on circulation	\$500.00
Expenses	62.50
Sinking fund	41.02
	603.52
Net receipts	\$7,396.48
Interest on cost of bonds at 6 per cent.....	6,075.30
Profit on circulation in excess of 6 per cent on the investment	\$1,321.18
Per cent profit.....	1.305

This estimate is a comparative one, showing that a national bank gains little by taking out bonds, securing notes and lending the notes at the current rate of interest (assumed to be six per cent), rather than by taking the original investment of \$101,255 and lending it at the same current rate of interest.

Reasons for Issuing Notes.—Opinions of bankers as to the profits actually gained do not agree with this calculation, or with each other. The calculation assumes that all of the notes are kept at work all of the time, which is by no means true, for to do this is not always easy. Country bankers pay their own notes out over the counter or deposit them with their reserve agents, thus indirectly placing them where they may be counted as a part of their reserves. Reserve city banks do the same and these two classes of institutions are in this way able to keep their circulation moving. As rapidly as it returns to them, via the redemption agency at Washington, it is again sent out. The banks in the central reserve cities, however, find the

problem a little more difficult, and as a result there is, ordinarily, a relatively larger margin between the United States bonds held by them at Washington and the amount of their notes outstanding.

Conversations with bankers on the subject reveal a difference of opinion on the entire question. To some it is simply the customary and expected thing. Others consider that there is some profit and a certain amount of advertising value in the notes. Probably the most careful would summarize the matter by saying that they issue notes because (1) there is often an actual though small financial gain; (2) a slight advantage is found in the advertising; (3) a certain amount of United States bonds add to the appearance of the bank's balance sheet, suggesting conservative management and the possession of a reliable secondary reserve; (4) the purchase of United States bonds is one way to cultivate friendly relations with the United States Treasury Department; (5) in the past some bonds have been purchased as a prerequisite to beginning business on which it is sensible to issue circulation; and (6) it is customary. The motive in a particular case is a composite one made up of several or all of the ones given above.

The Policy of the Banks Uncertain.—Just what will be in the future the attitude of bankers in this matter is uncertain. Many may wish to continue their issues. If United States bonds remain low in price, their cheapness may be a temptation as in the past. The banks may actually be encouraged to issue notes. If, however, they fear that the purchases by the new reserve banks will be insufficient to sustain the market, they may prefer to retire their issues as promptly as possible. Within the last year some have retired circulation apparently to guard against the possibility of loss by reason of the low market price of the bonds securing their notes. In other cases the directors have hesitated in the hope that the market would recover. Many newly organized banks have taken out the full amount authorized and, on the whole, the circulation has increased from \$717,467,661.50 on February 4, 1913, to \$756,418,459.00 on January 7, 1914. The future is too uncertain for predictions.

CHAPTER XIII

THE NEW RESERVE BANK NOTES AND REFUNDING THE BONDS

The Need for Reserve Bank Notes.—The retirement of the national bank notes would leave a large gap in our supply of money and, unless some provision were made for filling it, great inconvenience and much actual distress would result. Accordingly the Act authorizes the issue of notes by the reserve banks. These are not to be confused with the Federal reserve notes described later, as they are entirely different in form and in security.

Reserve bank notes are to be the obligations of the Federal reserve bank issuing them and "shall be in form prescribed by the Secretary of the Treasury and to the same tenor and effect as national bank notes now provided by law. They shall be issued and redeemed under the same terms and conditions as national bank notes, except that they shall not be limited to the amount of the capital stock of the Federal reserve bank issuing them." In other words, each reserve bank may issue an amount of these notes that is limited only by the deposit of the prescribed security.

Their Similarity to National Bank Notes.—The statement that the terms and conditions of their issue shall be the same as those of the national bank notes would indicate that these new notes must pay the same tax. The circulating notes of the national banks that are secured by United States bonds paying two per cent interest, are subject to a Federal tax of one-fourth of one per cent each half year, which amounts to one-half of one per cent per annum. The notes secured by United States bonds paying more than two per cent interest are subject to a similar tax of one-half of one per cent semi-annually, amounting to one per cent each year. It would seem certain that this tax is to be paid in the future by the reserve banks on their bond-secured circulation if it were not for the last paragraph of Sec-

tion 7 of the new law, which states that "Federal reserve banks, including the capital stock, and surplus therein, and the income derived therefrom, shall be exempt from Federal, State and local taxation, except taxes upon real estate."

Will They Be Taxed?—Does this exemption include the tax upon circulation? It is a Federal tax and, if imposed upon the new bond-secured circulation of the reserve banks, is rather obviously a tax upon the reserve banks. If it is collected from the national banks, as in the past, but not from the reserve banks, the latter are given an advantage of at least one-half of one per cent per annum in the matter of note issues, a difference that may be of material importance. In the preceding chapter attention was called to the small margin of profit to the national banks in buying bonds and issuing notes rather than in lending their money direct. If this small advantage is lessened by allowing the reserve banks to issue notes untaxed, the discrimination may accelerate the retirement of the national bank notes.

Occasions for Issuing Them.—Issues of bond-secured currency of the Federal reserve banks may originate in two ways, although all of the notes will be alike in form and in security. The first group will arise through the retirement of the national bank notes. The provisions of the Act relating to the purchase by the reserve banks of the United States bonds that now secure the national bank notes have been explained. At a rate not in excess of \$25,000,000 per annum these bonds must be taken over if they are offered, and if the Federal Reserve Board requires their purchase. The reserve banks purchasing them may deposit them in trust with the Treasurer of the United States, receiving from the Comptroller of the Currency an amount of circulating notes equal to the par value of the bonds so deposited. There will thus be no shrinkage in the volume of the currency, the amount of new reserve bank notes being equal to the national bank notes that are retired. The net result will be to relieve the national banks of the ownership of the bonds and their liability for the notes, and to transfer both the bonds and the note liability to the reserve banks.

The second way in which the reserve bank notes may get into circulation is under the provisions of Section 4. The eighth of the powers conferred upon the reserve banks in that section stipulates that they may, "upon deposit with the Treasurer of the United States of any bonds of the United States in the manner provided by existing law relating to national banks," receive from the Comptroller of the Currency circulating notes equal in amount to the par value of the bonds so deposited. These notes are identical with the ones already described, the only difference being that in the first case the bonds are the ones that now secure the circulation of the national banks, while in the second the bonds may not have been securing national bank circulation at the time of purchase, and may have been bought from other owners than national banks.

A Market Created for United States Bonds.—The significance of this provision lies in the fact that it creates a market for United States bonds. This power of the reserve banks may be of value in maintaining the price of the bonds, not only to the advantage of the present holders of those bonds but also to the advantage of the government. It is also important because, if this power is exercised, it will limit the amount of United States bonds that the reserve banks may purchase from the national banks to retire their circulation. The total amount they are permitted to purchase from both sources may not exceed \$25,000,000 per annum. Most of our government bonds are in the hands of the national banks. The owners of the balance, who are the trust companies, insurance companies and the general public, may, especially if the market declines, dispose of their holdings to the reserve banks, which will be tempted by the low prices to make the purchases, since they may exchange them at the Treasury Department for new three per cent bonds. This may be done to such an extent as to lessen the rapidity with which those banks could purchase from the national banks.

Refunding the Two Per Cent Bonds.—If the reserve banks do not wish to keep these notes out, and wish to

invest in United States securities bearing more than two per cent interest, they may do so through an arrangement for an exchange. "Upon application of any Federal reserve bank, approved by the Federal Reserve Board, the Secretary of the Treasury may issue in exchange for United States two per cent gold bonds bearing the circulation privilege, but against which no circulation is outstanding, one-year gold notes of the United States without the circulation privilege, to an amount not exceeding one-half of the two per cent bonds so tendered for exchange, and thirty-year three per cent gold bonds without the circulation privilege for the remainder of the two per cent bonds so tendered." The reserve bank may thus retire its note issues in the same way as the national banks now do, and then make an exchange in the manner described, getting three per cent securities in return for those bearing two per cent. The burden of the additional one per cent per annum interest charge will fall upon the government, an arrangement that is entirely proper, since for years it has borrowed at rates lower than are available for any other government in the world, and has done it by requiring the national banks to buy the bonds as a prerequisite to securing a charter and issuing notes.

The Significance of the One-year Notes.—The stipulation that "not to exceed one-half of the new securities shall be one-year gold notes" opens the way for a reduction in the national debt, if receipts to the Federal government from the earnings of the reserve banks or from any other source make such a reduction possible. The reserve bank will be required, upon receipt of these notes, to agree that as they mature year after year, it will purchase such an amount of new one-year three per cent gold notes as the Secretary of the Treasury may tender to it, not to exceed, however, the amount of such notes issued to the bank in the first instance in exchange for the two per cent bonds. This obligation to purchase notes shall continue for a period not to exceed thirty years. At the end of that time, if the Secretary of the Treasury and Congress do not find it pos-

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sible to retire these notes, some provision for refunding them can be made.

The Reduction of the National Debt.—Before leaving this topic it is interesting to notice that our new law has in two different places made provision for the reduction of the national debt. One-half of the net earnings of the reserve banks, after the payment of a six per cent cumulative dividend, is to be used in the creation of a surplus, until such time as this surplus equals forty per cent of the paid-in capital stock of the bank. The balance of the net earnings is to be paid as a franchise tax to the government, and may be used by the Secretary of the Treasury, at his discretion, to strengthen the gold reserve behind the United States notes or to reduce the outstanding public debt. This income is presumably to be devoted, first, to the retirement of the one-year three per cent notes just described and then, if there is a balance remaining, to the payment of any other outstanding obligation.

CHAPTER XIV

THE FEDERAL RESERVE NOTES

Our Inelastic Supply of Money.—The two most important qualities to be desired in the money used by any country are safety and elasticity. Gold is the one commodity acceptable the world over in settlement of a debt; and so long as any other form of money we use can be, at will, convertible into gold, it may be considered safe. In our monetary system the gold certificates, the silver dollars, the silver certificates, and the subsidiary silver cause no difficulty in this particular. Directly or indirectly they may be exchanged for gold. Since 1879 the same has been true of the United States notes or greenbacks, while at no time in their history has there been difficulty with the national bank notes. Secured as they are by a deposit of United States bonds with the Treasurer at Washington, there has never been any question as to their value.

Elasticity Difficult to Secure, but Important.—Elasticity is not so easy to secure. Even England, whose banking system ranks high, has almost no elasticity in her money supply, the entire structure being dependent upon elasticity of credit. The elasticity of the Bank of England note, if it may be said to exist at all, is only potential. Elasticity is needed because the demand for money is irregular. The situation is slightly analogous to the demand for freight cars which are needed in large numbers at some seasons of the year and in smaller numbers at other times. The result is a car surplus at one time and a car shortage at others. If the railroads could, at will, adjust exactly to their needs their investment in rolling stock, they would save themselves much embarrassment.

Serious as an inelasticity in the supply of freight cars may be, it is capable of less disaster than an inelastic supply of money. Business may adjust itself to the available

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supply of freight cars, but the demand for money is absolute and brooks no artificial barriers. Even though business may become adjusted to a given supply of money, it does not long remain so. The demand made for money is never the same, but varies from day to day, from week to week, from month to month, and from year to year. The amount of checks drawn against deposits—our so-called deposit currency—automatically adjusts itself, however, to these changes, the number of checks drawn always being equal to the demand for them.

Inelasticity Restrains Business.—If all our business could be done by check, and actual money were used only in the banks and in the Treasury of the United States for reserve purposes, inelasticity in the supply of money would be much less important. However, our demand for money as a medium of circulation varies constantly. If a considerable amount is withdrawn from the banks, as for example in the fall months, the power of the banks to lend is thereby curtailed, and they raise interest rates and reduce loans, perhaps making it impossible for many men with good security to get the aid they need. On the other hand, when money is not needed by the community, it is deposited in the banks which are tempted to lower their rates and expand loans in order to keep it busy.

An elastic form of money that could be issued in just the amount needed by business and promptly retired when that need was over is the desirable kind to have. Our gold, gold certificates, silver, silver certificates and United States notes, or greenbacks, are practically fixed in amount. The issue and retirement of our national bank notes is largely controlled by influences having no relation to the demands of trade. The bond-secured notes of the reserve banks are to be similar to the national bank notes, and their supply, plus that of the national bank notes that remain in existence, will probably be determined by the same influences as those affecting the volume of bank notes in the past. If we are to have elasticity it will be found in the Federal reserve notes.

The Differences between Notes and Deposits.—Within limits it is correct to say that a bank note and a bank deposit are similar, for each is a promise of the bank to pay on demand. There are, however, certain important differences. The deposit is circulated by means of checks which pass, upon endorsement, between individuals known to each other, and are not legal tender. The bank note does not require endorsement, passes freely among strangers, and while not always legal tender, is usually, as a matter of practice, accepted in settlement of a debt.

These differences, though briefly summarized, are of broad significance. Because of them, safeguards must be thrown about note issues that are unnecessary in the case of deposits. A bank may be allowed to create deposit liabilities with small restraint, and no serious harm result. This is actually the practice in most countries. The Bank of England, the Bank of France, the Bank of Germany and the banks of Canada are not required by law to maintain any specified cash reserve against their deposits. The only restraint imposed is the judgment of their managers. In the United States, we have insisted on the maintenance of a reserve in the form of cash and deposits with other banks, but we are the only country of any size that imposes any such legal restraints.

Limitations on Note Issues Are Usual.—But in all the leading banking systems there are limitations placed on the right of note issue. In France it is limited to the Bank of France. In England and Germany also, it is, with a few minor exceptions, limited to the central institutions. Another frequent form of limitation is in the amount of the issue. The banks of Canada may not issue beyond an amount equal to their capital stock, except during the fall and early winter; and upon the extra issues at that time a special tax must be paid. Under the new Canadian Bank Act of 1913, provision is also made for the issue of extra notes on the deposit of gold with certain trustees, a device which makes these special notes somewhat like our gold certificates.

The Bank of England notes, with the exception of £18,450,000 secured by government obligations, are issued only upon the deposit of gold. They are for the most part merely gold certificates. The Bank of Germany must pay a five per cent tax on issues beyond a specified minimum, known as the "Contingent," and must always keep a reserve in gold of thirty-three and one-third per cent behind all notes issued. The Bank of France is not required to keep any special reserve or security behind her issues, but may not exceed in amount a limit set from time to time by the National Assembly.

These restrictions imposed in other countries are not enumerated as meriting our imitation, but as an indication of the general attitude of the leading countries of the world. Restraints like those in England would probably give us no elasticity. Perhaps none of the devices described would exactly fit our needs; but an entire absence of limitations on note issues does not seem good judgment and is certainly contrary to practice elsewhere.

The bond-secured notes of the national banks and of the reserve banks are safe, but are made so at the sacrifice of elasticity. In an effort to provide this quality Congress finally agreed, after heated discussion, to an issue of Federal reserve notes that are not definitely limited in amount, but that are safeguarded (1) by the security behind each note, and (2) by the requirement that a certain reserve must always be held against the notes outstanding.

Federal Reserve Notes.—Reserve notes are to be obligations of the United States and are receivable by all national and member banks and reserve banks, and for all taxes, customs and other public dues. They are not legal tender for other purposes. Individuals can not be compelled to accept them, nor may the national banks use them as part of their legal reserves. State banks that are not members may use them, if permitted to do so by the laws of their respective States. Since they now use the national bank notes for that purpose, the new Federal reserve notes will doubtless be accepted in the same way. State banks that

are members of the system must comply with the reserve requirements that are prescribed by the organization committee and by the Federal Reserve Board, supplementing the stipulations of the Act itself. While the board may allow State member banks to continue using national bank notes and to use the new reserve banks' bond-secured notes in their reserves, it does not seem likely that they will agree to the use of the Federal reserve notes for the same purpose. Such a policy would give to the State banks that are members a very marked advantage, not only over the non-member State banks, which may discount indirectly with the reserve banks only to a limited extent, but also over the national banks, which will be unable to use the Federal reserve notes as a part of their legal reserves. If this supposition be correct, we are safe in saying that the Federal reserve notes may not be used as reserves by member banks.

These notes are redeemable in gold on demand at the Treasury Department of the United States at Washington in the District of Columbia, or in gold or lawful money at any reserve bank. If this provision is adhered to literally they will not be redeemable at the subtreasuries, a fact which may, on occasion, add to the difficulty of securing gold for them.

Method of Issuing the Notes.—Any reserve bank may make application to the local Federal reserve agent (that is, the chairman of its own board of directors) for such amounts of these notes as it may require, at the same time offering, as collateral security therefor, commercial paper and bills rediscounted by it for member banks. This security must be at least equal in amount to the notes received. Some of these securities may from time to time be withdrawn, with the approval of the Reserve Board, if at the same time other collateral of equal amount is substituted. The Reserve Board may also at any time call for additional security. As the notes may be issued for no other purpose than in exchange for such collateral, and since this collateral is in the form of rediscounted paper,

it may be said that the notes are issued only through rediscounting.

They will be in denominations of \$5, \$10, \$20, \$50 and \$100. As there are no specifications as to the relative amounts of each, it is probable that the kind needed will always be furnished. All expenses incident to their issue and retirement must be met by the reserve bank receiving them, which shall also pay on them a rate of interest to be determined by the Reserve Board. Each note will bear the distinctive number of the reserve bank through which it is issued. In anticipation of demand for them a quantity are to be prepared and deposited in the Treasury or in the subtreasury or mint of the United States nearest the place of business of each reserve bank, where they shall be held subject to the order of the Comptroller of the Currency.

The Reserve behind the Notes.—Against its deposit liabilities, every reserve bank must keep a reserve of not less than thirty-five per cent in gold or lawful money. Against the notes, however, the reserve required is not less than forty per cent in gold for all that are in actual circulation and not offset by gold or lawful money deposited with the reserve agent. This does not mean that each bank will always maintain merely the required minimum. With no legal requirement at all the Bank of England kept an average of 47.4 per cent against its demand liabilities from 1901 to 1910 inclusive. During the same period the Bank of France kept an average of 84.5 per cent and the Bank of Germany 72.5 per cent in cash against their note issues alone. We may expect that in view of their heavy responsibilities, some if not all of the reserve banks will constantly keep more than the required minimum.

One of the serious difficulties with a system in which the law specifies the reserves that must be held, is the fact that the legal limitation in itself implies that the reserves are not to be used. When the limit is reached, the banks are legally debarred from lending. If they continue to make loans, they break the law; while if they refuse, they

seriously hamper business. The Act endeavors to avoid this difficulty by authorizing the Federal Reserve Board to suspend any and every reserve requirement in the Act for a period not exceeding thirty days, and from time to time to renew such suspension for periods not exceeding fifteen days.

Checks against Excessive Issues.—This applies to the reserves of the reserve banks and also to those of all member banks, both national and State, except where it would involve a violation of the laws of the States in which State banks and trust companies belonging to the system are located. We are concerned in this chapter, however, only with the reserves against the notes. The forty per cent requirement may be suspended by the Reserve Board, but another check is introduced in the requirement that if the gold reserves against the note issues shall fall below forty per cent, a graduated tax shall be paid by the reserve bank. This tax shall be at the rate of not more than one per cent per annum upon the deficiency, unless the reserve falls below thirty-two and one-half per cent. If it goes below that point, the tax shall be increased by one and one-half per cent per annum upon each two and one-half per cent, or fraction thereof, that such reserve falls below thirty-two and one-half per cent. This tax is to be paid by the reserve bank, but it is required to add an equivalent amount to the rates of interest and discount fixed for it by the Federal Reserve Board.

The facts recited have to do solely with the legal requirements as to the form and manner of the note issue, but do not give a picture of the actual process. This will be described in the next chapter and will be followed by a discussion of the possibilities of inflation through the issue of notes.

CHAPTER XV

ISSUING AND RETIRING THE FEDERAL RESERVE NOTES

Reserve Banks Will not Retain National Bank Notes.—Probably national bank notes will not be held in the vaults of the reserve banks to any considerable extent. The reserves of these banks must be in gold or other lawful money, and consequently they will send all national bank notes received by them to the redemption agency at Washington in order to secure lawful money, which may be used in their reserves. They may, on occasion and perhaps always, present to an individual national bank its own notes. Especially would this occur if such a bank's account with the reserve bank were growing large and needed to be offset. In such a situation all notes of that bank received by the reserve bank would be charged against its account and the notes themselves returned. In the future national bank notes will by these two methods be presented for redemption much more promptly than in the past. It has been customary for these notes to be sent to Washington chiefly through New York and a very few other large cities. Each bank receiving national bank notes that could not be counted in reserves has deposited them for credit with a reserve agent who has, when possible, passed them on. When they could be redeposited no longer, the bank holding them (usually a bank in a central reserve city), has sent them to Washington.

Redemption Process Will Be Hastened.—This process has taken considerable time. While individual notes may have come back to the bank of issue several times during a year, the total issue of any bank has required more than a year to return. Hereafter this may be somewhat hastened. A Federal reserve bank may deposit cash with another reserve bank, but only for exchange purposes. National bank notes may be included in such deposits, but

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the limitation to exchange purposes indicates that they will not be so used in very large volume. The natural way to dispose of them will be to send them back to the bank that issued them or to the redemption agency at Washington, which will return them. If this greater rapidity of the redemption process occurs, the national banks may be inclined to retire their circulation. Unless the notes can be kept out, the profits thereon will be still further reduced and the privilege of note issue becomes less valuable.

Form of Payment by the Reserve Banks.—The next form of money which may be offered by a reserve bank to its member banks is the bond-secured notes of the reserve bank itself. These notes, it will be remembered, are secured, like the present national bank notes, by United States bonds deposited with the Treasurer at Washington. Since the funds of the reserve banks may be in part invested in these bonds, which will yield only two per cent interest, they will wish to keep them out as much of the time as possible, and will offer them whenever they can. If there is a demand for still more cash, or if the reserve bank does not wish to give either of the kinds of money thus far named, the next kind to be handed out will be Federal reserve notes. As already explained, these notes may not be issued except in return for rediscounted paper of the sort acceptable under the terms of the act. Inasmuch as the issue of these notes will not reduce the reserves of the reserve bank, they will usually be issued in preference to gold or other lawful money. Application for the notes must be made to the Federal reserve agent, and the required collateral must be deposited with him. A rate of interest, established by the Federal Reserve Board, will be charged the reserve bank for all the notes received by it.

Purposes for Which Member Banks Need Cash.—A member bank may need cash for one or both of two purposes. The cash may be wanted for counter money, to be handed out as there is call for it by the customers of the bank; or the member bank may want cash because its reserves are low and need to be replenished. For the former

purpose the Federal reserve notes, as well as national bank notes and reserve bank notes, may be used. They will doubtless be accepted as readily as any other form of money. No one of them, however, is available for use in the reserves of the member banks, and if the demand for cash is prompted by this need, none of these forms will be satisfactory. The problem could have been solved by specifying in the Act that these notes could be used as reserves by member banks, at the discretion of the Federal Reserve Board. In fact, this form of solution was discussed from time to time, but as finally passed the Act does not make such provision. The member bank may, however, take the Federal reserve notes as soon as they have been issued and present them at the counter of the reserve bank from which it received them and ask for lawful money. If it should hesitate to present them so promptly, it could exchange them for lawful money at another bank, perhaps a non-member institution, and that bank could either hold them in its reserves or present them for lawful money either at one of the reserve banks or at the redemption agency at Washington. There is thus a way by which the member bank may secure lawful money whether the reserve bank wishes to deliver it or not.

The Wisdom of the Plan Doubtful.—The wisdom of such an arrangement is by no means certain. When it was suggested that such notes should be used by the member banks as a part of their reserves, there was expressed great fear of inflation. Many felt that there might be an irresistible demand by the banks to rediscount their paper merely in order to secure notes that could be used as a basis for new loans, the second instalment of commercial paper thus secured to be in turn rediscounted to secure still more notes. Such an outcome, it was urged, would merely mean an over-extension of credit and enormous inflation. The proposal that the Federal Reserve Board might be allowed to use their discretion in the matter was also voted down.

Was the final decision an improvement? As with most other questions that involve the future, positive conclu-

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sions are impossible, but a careful examination of the probabilities of the case makes one doubtful. If a particular bank needs help, any form of money is acceptable to it, provided it may be offered to creditors in settlement of obligations. In such cases the Federal reserve notes will meet the need. Any bank may pay them out over its counter to individual customers or even compel their acceptance by other banks in the settlement of unfavorable clearing house balances, since the Act specifies that they "shall be receivable by all national and member banks and Federal reserve banks." They must also be taken by the government and doubtless will be acceptable to non-member banks.

But such occasions are not the only ones upon which Federal reserve notes will be needed. When business uncertainty is general, when there is widespread unrest and not merely distrust of a particular bank, the need is not so much for cash as for increased power to lend. The same need is the dominant one during any normal expansion of business. Unless loans are granted at such times, business becomes congested, transportation is checked, obligations can not be met, and failures follow. In the past our national banks have often had to choose between breaking the law and paralyzing business. It is to their credit and to the credit of the Comptroller of the Currency that they have often broken the law in order to prevent commercial disaster.

Federal Reserve Notes not Legal for Reserves.—The use of Federal reserve notes as reserves by member banks is not authorized by the Act. Even with a normal expansion of business, rediscounting by a member will not furnish it with an addition to its reserves and facilitate loans. The needed help must be secured indirectly, and three methods are possible. First, the Federal reserve notes may be handed out to customers, all lawful money in the possession of the bank being retained. Second, the reserve notes may be paid out to a non-member institution which is allowed by the laws of its State to count them as reserves. Third, the reserve notes may be presented for redemption in lawful

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money at any one of the reserve banks, or for redemption in gold at the Treasury Department in Washington.

If the third of these alternatives is adopted by the member bank, prompt redemption of the notes is secured, but perhaps at the expense of the lawful money holdings of the reserve banks. If the notes are paid to or exchanged for lawful money with a non-member bank they may go into its reserves and are made the basis of loans. If they are paid out over the counter to the customers of the bank, they probably will not remain indefinitely in circulation. It may be presumed that a few, but only a very few, will be hoarded. Since the denominations range from five dollars to one hundred dollars, they will certainly not stay in general circulation as readily as the one dollar and two dollar silver certificates, but will drift into the tills of the stores and other business concerns, to be redeposited by them in the banks. This will be especially true of the higher denominations.

Will Be Retired Rapidly.—Our experience in this with the national bank notes which are issued in denominations of five dollars and up, is interesting. During the year ending June 30, 1913, national bank notes to the amount of \$675,889,000 were sent to the redemption agency at Washington. This is 90.01 per cent of the average amount of these notes outstanding during the year. It is fair to suppose that the national bank notes and the reserve bank notes, which are much alike, will be redeemed with equally as great rapidity.

The Process of Redemption Described.—This redemption process will be hastened by the fact that the Federal reserve notes issued through one reserve bank that are received by another reserve bank must be promptly returned for credit or redemption to the bank through which they were originally issued. No reserve bank shall pay out notes issued by another under penalty of a tax of ten per cent upon the face value of the notes so paid out. The situation will be similar to the one we find to-day in the clearing of checks. Every bank promptly forwards to the clearing

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house, or sends for collection through the mail, all items it holds against other institutions, knowing that checks against itself will be coming back promptly and also that the law requires prompt collection to avoid loss on worthless items. Any reserve bank receiving the notes of another reserve bank will be similarly influenced.

Provision is made for the redemption of the Federal reserve notes at any Federal reserve bank in gold or lawful money, and in gold at the Treasury Department in Washington. No reference is made to redemption at the sub-treasuries. This will doubtless mean that a considerable number of notes will concentrate for redemption purposes in Washington. Each reserve bank is required to maintain in the Treasury of the United States at Washington a deposit of gold which is sufficient, in the judgment of the Secretary of the Treasury, for the redemption of the Federal reserve notes issued to that bank, but which shall in no case be less than five per cent of that issue. This deposit of gold may be counted as a part of the forty per cent reserve required behind the notes. When notes are presented for redemption at Washington, payment is to be made out of this redemption fund and the notes returned to the reserve bank through which they were originally issued. That bank shall then be required to reimburse the redemption fund in lawful money. If the redemption at the Treasury Department has been made in gold or gold certificates, then the reimbursement shall be in gold or gold certificates to such an extent as may be deemed necessary by the Secretary of the Treasury. If the Treasury Department receives Federal reserve notes otherwise than for redemption,—for example, in payment of taxes,—the notes so received may be exchanged for gold in the redemption fund and returned to the reserve bank, or they may be returned, without being diverted to the redemption fund, for credit to the deposit of the United States.

Contraction Will Be Prompt.—There is thus a method for the prompt issue of the Federal reserve notes to any amount that may be required by any member bank that is

willing to offer as security for them the paper acceptable for rediscount. There is also provision for the prompt retirement of these notes as rapidly as they shall reach the vaults of the various reserve banks or the Treasury Department. There are several other reasons for believing that contraction will be prompt. These notes are issued as an advance to member banks upon collateral security. When the discounted paper, which is furnished as collateral, falls due, it must be collected, and the reserve bank will presumably deliver it to the member bank for collection rather than attempt to collect it direct. Since the member has endorsed the paper, it will be liable for payment, and the bank will, in so far as possible, deliver national bank notes, reserve bank notes and Federal reserve notes in settlement of the obligation, unless of course it wishes to substitute other collateral and such substitution is acceptable to the reserve bank. It will also be necessary for it to maintain its required reserves with the reserve bank of its district, and perhaps also a considerable balance in excess of the reserve for exchange purposes. There will be an inducement to turn in promptly the forms of money just referred to, rather than gold and other lawful money which may be held in reserve.

The New Note Issue Elastic.—This description of the processes of issue and of retirement answers, to a considerable extent, the question of the elasticity of the new form of money. The notes will be put out only when business calls for cash. They will be retired just as promptly as the demand for this increased amount of money is passed. The general public will not distinguish between the different kinds of money and doubtless will retain some of the Federal reserve notes in their pockets indefinitely. Within a short time, however, most of them will drift into the hands of the banks, which will dispose of them in the manner described. Provision thus seems to have been made for elasticity. Even their use by non-member State banks will not destroy this arrangement. Upon the maturity of the collateral security held by the Federal reserve agent, the

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member bank must make payment. If reserve notes are not at hand, other forms of money must be used or a new supply of paper rediscounted. In no case is the reserve bank or the Federal reserve agent left without adequate protection. If the commercial paper is withdrawn, reserve notes or other forms of money must be paid for it.

They Are also Safe.—This raises the whole question of their safety. The security behind the national bank notes and reserve bank notes is the United States bonds, but many feel that the security behind the Federal reserve notes is not adequate. A summary of the nature and extent of that security is necessary to a fair judgment. Probably no better statement on this point has been made than the one given by Senator Owen, Chairman of the Committee on Banking and Currency of the United States Senate, during the hearings on the bill. During the questioning of Mr. Untermeyer on September 22, 1913, Senator Owen interposed the following statement which can not well be improved upon:

“The primary security against these notes consists of the note of the individual which is discounted, and which, under the terms of this bill, has a short maturity. Under the law of probabilities, the danger of a man who is regarded as good by a bank and to whom the money is loaned failing within 60 or 90 days would probably be about one in 25,000.

“And such a note, before it becomes a security under the system for the issuance of these Treasury notes, must also be endorsed by the member bank. And under the law of probability, the probability of a member in good standing, examined by the examiners, and reported as sound, failing within the period of 60 days, or 90 days—the life of the contemplated transaction—is probably one in 100,000. And the measure of probability of the failure of the individual maker of the note and of the bank which indorses that note, failing within the limited number of days, would be measured by 25,000 multiplied by 100,000.

“If, however, such a contingency should arise, then the

note has the further security of the double liability of the stockholders of the member bank indorsing that note.

"If, however, those resources should fail, the government in that contingency would, against such a loss of security, have the stock of that particular member bank that failed in this reserve bank.

"In addition to that, however, it would also have the security of the reserve deposit of this member bank with the reserve bank. If, however, those resources should all fail, the government would have a further safeguard as to these particular notes, in the thirty-three and one-third per cent gold reserve required against the notes.

"And in addition to that it would have a first lien upon the assets of this bank, which you have in this particular case of exemplification named, amounting to \$40,000,000.

"And in addition to that you have the double liability of the member bank for the amount, equal to a like sum with their capital.

"There never has been, in the history of the world, a note secured by such a volume of security."

The accuracy of Senator Owen's conclusions based upon the "law of probabilities" may be questioned. Dun's Review shows the percentage of business failures in the twelve months of 1911 to have been eighty-eight one-hundredths of one per cent, which is about one failure out of every one hundred and fourteen business establishments. The report of the Comptroller of the Currency shows three national bank failures in 1911 out of a total of 7,328 banks or one in 2,442 banks. The statistics in Dun's Review are not a complete picture, since a certain number of small business establishments are not included.

Upon the basis of the above figures, the chances of the average business concern failing within sixty days is about one in 684, and the chances for a national bank failing in this period is one in 14,652. The chances of a business concern and the bank through which its paper was rediscounted, failing within this time, would be these sums multiplied, or one in 10,021,968. While this result is somewhat

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below that indicated in the statement of Senator Owen, nevertheless it strikingly illustrates what a small risk a reserve bank takes in buying the paper of a business establishment endorsed by the selling member bank.

Not Similar to the Greenbacks.—The notes are promises of the government, but the security that is placed behind them puts them in a class very different from the greenbacks. A point not sufficiently emphasized in Senator Owen's statement is the further fact that the commercial paper protecting these notes may not be of a maturity of more than ninety days, except a limited amount of paper drawn or issued for agricultural purposes or based on live stock, which may have a maturity of not more than six months. The fact that this paper quickly matures and must be paid means that the notes will be retired or lawful money be delivered to the reserve bank in settlement. In either case the reserve bank has been furnished with assets sufficient to meet the outstanding notes.

CHAPTER XVI

POSSIBILITY OF INFLATION

What is Inflation?—There are few questions, even in the field of money and banking, upon which there is a more vigorous difference of opinion than upon inflation. Each disputant has a different idea of the meaning of the word and usually does not employ the same meaning twice in succession. In fact it would not be far wrong to say that most people use the word with no clear idea at all.

This is not surprising, as an exact definition of the term is extremely difficult. By it is usually meant either (1) an increase in the volume of money that will drive gold from the country and leave us with an inferior money in its place, or (2) an unwise increase in bank loans due to an increased output of money or to some other cause. It has been urged that under the new Act both of these conditions will result. It is pointed out that the issue of reserve notes to an unlimited amount—for no limit is fixed by the Act itself—will result in the appearance of a very large volume of money that will go into the vaults of the banks and the pockets of the people, taking the place of the various forms of lawful money now used; that this increase in the supply of money will result in interest rates in the United States so much lower than those abroad that foreign bankers will borrow from us and our bankers will be tempted to lend elsewhere than in our own country; and that, as a consequence, the demand for exchange will be quickly raised to the point where the exportation of gold from the country will be profitable. This withdrawal of gold, it is said, will continue until an equilibrium has been reached. In the meantime the larger supply of cash in the vaults of the banks will encourage bankers to lend more freely than before, and will perhaps tempt them to accept inadequate security, thus giving encouragement to enterprises which should not be undertaken.

Why It Has Been Feared.—One of the most effective presentations of this view was made by Senator Elihu Root in his speech before the United States Senate on December 13, 1913. He laid stress upon the spirit of optimism which is so strong among all mankind, and which, in the absence of restraint, always leads men to take a rosy view of the future. As a result the earning power of properties is overestimated, the success of new enterprises seems absolutely sure, failure seems impossible, and, therefore, values are increased until the breaking point is reached. This undue rise in values is in itself injurious and encourages speculation and gambling, while the reaction which always comes sooner or later brings with it widespread disaster.

Senator Root pointed out that the Federal reserve notes provided for in the bill are to be promises of the United States government. There is already outstanding in the United States a tremendous volume of different forms of money, including gold coin, standard silver dollars, subsidiary silver, gold certificates, silver certificates, Treasury notes of 1890, United States notes or greenbacks, and national bank notes, which altogether amounted on November 1, 1913, to \$3,417,109,678. The gold certificates are protected by gold held in trust against them, and the silver certificates are protected by silver dollars whose market value is now about one-half of their face value. Allowing for these facts, Senator Root found a total of \$824,064,118 of government obligations, behind which the government holds \$150,000,000 in gold reserve and the silver dollars above referred to, which would give a total metallic value of about \$391,331,000. At the time Senator Root was speaking, the bill provided a reserve in gold or lawful money of thirty-five per cent behind the deposits of the reserve banks and the Federal reserve notes. As finally passed, the reserve against the notes alone was raised to forty per cent, so that Senator Root's estimates need to be slightly modified. He declared that the cash assets of the new reserve banks would be \$636,000,000. If this amount is correct and consisted of gold, it would make possible an enormous note issue. This great increase in government

obligations was viewed with dread by Senator Root and many others, and it was doubtless because of their protests that several important changes were introduced in the wording of the Act.

Federal Reserve Notes are Promises of the Government.—If inflation is possible under the new law, it will be accomplished through the unlimited increase of paper bearing the government's promise to pay. This paper is referred to as fiat money by those who fear its harmful effects. It might be a danger to the community, if it were held in the reserves of the banks, encouraging careless lending and displacing gold or other lawful money in the pockets of the people. This condition might result in the exportation of gold as previously explained. A further reason for fearing inflation is found in the lower reserve requirements of the various banks. It is held that the money set free because of the reduction of the required reserve of the country banks from fifteen per cent to twelve per cent, of the reserve city banks from twenty-five per cent to fifteen per cent, and of the central reserve city banks from twenty-five per cent to eighteen per cent, would give to the community an increased supply of cash that would tempt extravagance and carelessness.

Senator Root and others declared that the checks provided against this inflation were insufficient, and would be entirely ineffective. Thus, for example, the bill provides no limit to the amount of notes to be issued, nor does it provide any surtax on issues beyond a given point. The limit set by the National Assembly on the note issues of the Bank of France is 6,800,000,000 francs. Issues beyond a given limit by the Bank of Germany are taxed at the rate of five per cent per annum, and all note issues of the Canadian banks in excess of their capital are subject to tax, unless fully secured by a deposit of gold. Our law, it is urged, should impose a similar restraint. The restriction that no bank shall lend to any one person, company, firm or corporation in excess of ten per cent of its capital and surplus is held to be entirely unsatisfactory, because it is followed by the stipulation, "but this restriction shall not apply to

the discount of bills of exchange drawn in good faith against actually existing values." It is urged that this qualification renders of no effect the preceding limitation. In the words of Senator Root, "there is no new enterprise conceivable in this country; no one of us has known, in the past decade, a new enterprise which could not be financed by bills and notes coming within the description of the bill I have read."

Checks against Inflation.—In reply there are a number of arguments to be presented. Under the terms of the bill only commercial paper is acceptable for rediscount. This commercial paper is defined in the Act as "notes, drafts and bills of exchange issued or drawn for agricultural, industrial or commercial purposes or the proceeds of which have been used or are to be used for such purposes." The application of this definition may be subject to dispute, but it is stipulated that the Federal Reserve Board shall have the right to determine or define the character of the paper thus eligible for discount within the meaning of the Act. "Notes, drafts or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds or other investment securities, except bonds and notes of the government of the United States," are specifically excluded. Commercial paper represents actual tangible transactions of short duration, the termination of which will automatically furnish the means for paying the obligation. Whenever good commercial paper comes into existence, it should be possible for the maker of that paper to secure money upon it. The fact that the ten per cent limit is not to apply to bills drawn against actual existing values is held to have no serious significance, since the existence of actual values furnishes ample security for the bills, if they are of the sort just described. This description suggests the reply to the charge that there is no restriction placed on the "discount of bills of exchange drawn in good faith against actually existing values." Critics of the new law overlook the rather obvious purpose of this statement and completely ignore the context. It is found in the paragraph that limits "the aggregate amount of such notes and bills bearing the signature or endorsement of any one

person, company, firm or corporation rediscounted for any one bank," at any one time, to no more than "ten per centum of the unimpaired capital and surplus of said bank." The entire purpose of rediscounting is to make always possible the financing, on a conservative basis, of the actual transfer of goods. There is no reason why a merchant should not be allowed to ship goods and then draw against consignees without any limitations as to amount, if he is a careful business man, does not inflate unduly the value of the goods and attaches the bills of lading, warehouse receipt, or other security to the draft. The vital considerations are, (1) the existence of an actual transaction, that is, the drawing of bills in good faith, and (2) the evidence that the values really exist, proof of which may be found in the bill of lading or other document that should be attached to the bill. Moreover, the section in question is not new, but is taken with slight changes from the National Bank Act, where it may be found in Section 5200 of the Revised Statutes.

Only Commercial Paper Acceptable as Security.—To the charge that inflation is possible under the provision allowing the rediscount of "notes, drafts and bills of exchange secured by staple agricultural products, or other goods, wares, or merchandise," the same answer may be given. There must be an actual commercial transaction in every case. The bills must be drawn in good faith. The first requisite is that the ownership of the goods must change, and it makes no difference whether they have been carried from one city to another, or merely remain in a warehouse. The important consideration, however, is whether the occasion for making the note or drawing the draft is "an actual commercial transaction," or merely an investment or speculation. If the former, the paper may be offered for discount at a reserve bank. If the latter, it may not be so used. Speculation in wheat on the Chicago Board of Trade is conducted by the transfer of warehouse receipts issued against grain in storage in some Chicago elevator, or to be delivered there at some specified future

date. Would commercial paper arising from such speculative transaction be eligible for rediscount and as security for note issues? Is this "an actual commercial transaction?" It is clearly not so intended by the spirit of the law, and it is the duty of the Federal Reserve Board in drafting its regulations effectually to debar such paper from either privilege.

There must, then, be in every case a bona fide commercial transaction, the exact definition of which is left to the Reserve Board, but a transaction which must be of short duration, maturing within the life of the bill, and which must not, at the time of discount, exceed ninety days. The same is true of those bills drawn for agricultural purposes or based on live stock, except that they may still have one hundred and eighty days to run.

Collateral is Short Time.—The fact that only this short-time paper is acceptable for rediscounting is another check. If a bank discounts this paper with the reserve bank of its district, the maturity of that paper will occur not more than ninety days (or, on a limited quantity, one hundred and eighty days) later. Thus it is impossible for a bank to rediscount an unlimited amount. The paper is continually coming due and must be paid. Since collection will doubtless be made through member banks, the responsibility of making payment is placed directly and immediately upon the bank that discounted the paper. The right to discount acceptances based on the importation or exportation of notes is limited to one-half the paid-up capital stock and surplus of the bank for which the rediscounts are made; and, as suggested in another chapter, the practice will perhaps not be rapidly extended. Although the discount of the direct obligations of member banks was originally provided for, the final form of the bill does not permit of their use.

Responsibility on Bankers.—This brief statement of the arguments presented on the two sides of the subject shows that most of the discussion has been over the terms of the law. Many have either not read carefully its provisions, or else have lost sight of the most important fact in

the whole problem, which is that no system can eliminate the personality of the banker. Banking law is, in all countries, far less important than banking practice. The only laws of significance governing the operations of the Bank of England have to do with checks on the issue of notes. The great structure of credits, by whose aid the larger part of the business of the country is performed, receives almost no legal recognition. It is restrained in its operations by precedent and by the force of public opinion.

A reorganization of our system necessitates the establishment of numerous restraints in the law itself. Note issues must be protected, examinations of the banks and reports by them must be provided for, and in many other ways the banks must be brought under governmental control and supervision. But discretion in the operation of the plan must be lodged somewhere. Legal machinery can not take the place of individual judgment, even though safeguards may be imposed. Individual bankers must pass upon each loan, and either an individual, or some responsible group with authority, must be allowed to decide the broader problems of policy that will constantly arise.

The real responsibility must rest, first of all, not in the law but in the judgment of the bankers themselves. Under the Act the officials of each member bank must first pass upon the paper. Inasmuch as they are subject to careful examination and limited by the law in various ways, and especially because any loss thereon will fall entirely upon them, they will doubtless hesitate fully as much as at present to lend to any one who does not give adequate security. Since only commercial paper, as defined by the Federal Reserve Board, may be rediscounted, perhaps even greater care will be exercised in the future than has been in the past. All paper that is rediscounted is subject to the scrutiny of the reserve bank to which it is presented. In this laborious and responsible task the existence of branch offices will be a distinct help. Directors of branches will be able to know local conditions. They will be able to form very definite opinions as to the care which each member bank is using in the conduct of its business, and will be in a posi-

tion to control discounting by any bank that shows symptoms of weakness. Oversight by each reserve bank will therefore be a definite check on the rediscounting of poor paper by member banks.

Reserve Board Must Supervise.—The Federal Reserve Board, to which application must be made for notes secured by the discounted commercial paper, will not be in a position to pass judgment effectively on the quality of that paper; nor does the law intend that it should be called upon to do so. Its work will be that of determining whether, on the whole, business conditions warrant the issue of as many notes as are applied for. If evidence of over-expansion appears, checks that are within its power may be applied. These checks have been stated in the chapters discussing the powers of the Federal Reserve Board, and the way in which they are exercised has been described; but they may be again enumerated. The Reserve Board designates one-third of the directors of each reserve bank and is thus in a position to determine the trend of action of the reserve banks; may examine the accounts and books of reserve banks and of member banks at its discretion; may permit, or even require, one reserve bank to rediscount for another; may suspend or remove officers or directors of the reserve banks for cause; may require the writing off of doubtful or worthless assets by the reserve banks; may impose restrictions, limits and regulations upon rediscounts by reserve banks; may raise the rate of interest paid by each reserve bank for the notes it receives; may require a reserve bank to furnish information as to the condition of any member bank in its district. Most important of all, it is to review and determine the rates of discount to be charged member banks by the reserve bank, and may insist upon such changes in that rate as may be necessary to check undue expansion in rediscounts. Through its general power of direction and oversight, it may direct certain open-market operations by the reserve banks, which may be used to advantage in checking any tendency to inflation.

Methods of Checking Inflation.—Let us suppose that there arises a tendency to over-expansion of business in one

of the reserve districts. Primarily the individual bankers are responsible, and it is their duty as bankers to scrutinize every application for a loan with great care and perhaps to raise the rates charged to borrowers. If carelessness or poor judgment among the individual banks permits the system to get beyond their control, the reserve bank of the district will use its influence. The officials and directors of this institution are experienced bankers. Each director of Class A will be able to control the policy of his own bank, and by his suggestion and advice indicate to other bankers of the district the attitude of the reserve bank toward general business conditions. The rates for rediscount may be raised, and commercial paper offered as collateral will be more strictly scrutinized.

The Federal Reserve Board will, of course, be closely watching developments within this district. If expansion is going on too rapidly for safety, it may reject applications for notes, raise the rate of interest that must be paid by the reserve bank that receives them, and insist upon a higher discount rate to be charged member banks within the district. If the difficulty is with a particular member bank or banks, special examinations and reports may be ordered. If there should be gross negligence or incompetence among the officials or directors of the reserve bank, the inefficient men may be removed by the Reserve Board and new elections ordered or appointments made. If outside help is needed, the other reserve banks may be permitted or required to rediscount for the one that is in difficulty.


Note Issues not Always Profitable.—Most critics fear that inflation will come through an excessive note issue, but it must be remembered that it will not always be to the advantage of the reserve banks to issue Federal reserve notes. So long as possible or advisable, they will pay out other forms of money. National bank notes will be sent back to the bank of issue or to the redemption agency at Washington, but the bond-secured notes of the reserve banks will be used whenever possible. Even lawful money may be given out if reserves are large or if the demand is urgent, since any insistence on giving its own bond-secured notes or

Federal reserve notes would merely mean the immediate presentation of the latter for redemption in lawful money. The delay secured by refusing the lawful money at the outset would be of little or no importance. The reserve banks may even be in such a strong condition that they will consider it entirely safe and proper to pay out freely their holdings of gold and other lawful money.

Effect of Interest on the Notes.—Besides the Federal reserve notes may be secured for issue only by the deposit of collateral and upon them the reserve bank must pay interest, thus making their use expensive. In fact, this interest may answer the purpose of the tax imposed on extra note issues in many countries and on the emergency circulation provided for by the Aldrich-Vreeland Act in the United States. The amount of this interest rate is to be fixed by the Reserve Board and may be raised or lowered at its discretion. If the board fears an over-issue by any reserve bank it may begin charging it a higher interest on the notes it issues. It even appears possible to charge different interest rates to different reserve banks at the same time.

It is thus clear that the real check against inflation rests in the judgment of some responsible individual or group. In the past, each banker has been responsible for the proper management of his own institution. Even if he were incapable, he might be able to escape. Other bankers would not dare allow him to fail, since his ruin would involve the rest. When several banks of a city or of a section of the country were weak, there has been no one responsible. Difficulties have often developed that could and would have been avoided under a different banking organization.

Whether the new law will prevent a recurrence of such troubles it is impossible to say with absolute certainty. As before, we must emphasize the importance of two factors. The bankers are primarily responsible within each district. For the country as a whole we must depend upon the Federal Reserve Board. The ability, judgment, tact and discretion of these two groups will determine the outcome.



CHAPTER XVII

OPEN MARKET OPERATIONS

Purposes of the Law Summarized.—The preamble of our new law describes it as "An Act to provide for the establishment of Federal reserve banks, to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes."

Each reserve bank will be a medium through which these objects are to be attained for its district. By discounting paper and issuing notes, each will furnish elastic currency, and by holding a part of the reserves of its members will concentrate the cash of the country where it can be used. Funds not immediately demanded by members will be invested along such lines as the Act permits. Rediscounting, issuing notes and investing surplus funds will constitute the bulk of its work.

Reserve Banks Must Forestall Trouble.—But this is only a part of its duties. In so far as possible each reserve bank must foresee trouble in the money market and when trouble arises must furnish assistance. These difficulties may arise either within the United States or from without, but no matter what their origin, they must be foreseen, and checked. Trouble at home may arise because banks lend on inadequate security, or because rumor of the weakness of one or several banks has been circulated, perhaps without foundation. Withdrawals of gold to other countries, when better interest rates are offered, may lessen the supply available for local uses and so hamper business through the inability of the banks to lend. Such contingencies as these will make it necessary for the reserve banks to be continually on the alert. They will be responsible and resources should be placed at their disposal that will make it possible for them to do what is expected. Otherwise they may be

compelled to watch idly while trouble develops to a point where nothing can check its spread.

Methods Employed Abroad.—This power to prevent the development of trouble is used very effectively in other countries, and involves three general features: first, a close supervision of all current market operations; second, ability to conserve the gold supply of the country; and third, the power to control the movement of the foreign exchanges. Each of these three may be examined in order. Inasmuch as the third is in practice a corollary of the second, these two may be discussed together. Supervision of market operations may be accomplished by giving to the central institution the right to deal directly with the public. This is the practice of the Bank of England and other leading central banks. In England, any person, firm or company constituting a good credit risk may secure loans and discounts at the Bank of England. In Germany, all classes of people may deal with the Reichsbank and about forty per cent of the total amount of the discounts of that bank are made for the general public, as distinct from banks and bankers. Of its 66,700 customers in 1910, only 2,400 were banks. Thus, in numbers, less than four per cent were banks, while the balance was made up of merchants, manufacturers, farmers and others. About thirty per cent of the discounts of the Bank of France are made for the general public, and the other seventy per cent come through the banks.

Advantages Gained.—This ability to deal directly with the public has a double advantage. Funds of the central institution are kept constantly in use, and thus the earning power of the bank is increased. If these funds are properly invested in liquid securities, they may be turned into cash whenever such action seems advisable. The second advantage is that the central institution may, by changing the rate at which it does business with the public, give periodical notice of its estimate of general business conditions, and also compel the other banks to adopt conservative methods. The central bank becomes a direct competitor of the others,

a fact which is not at all to their liking, but the daily contact with business, which is thus secured, is very valuable in making possible a careful control of the money market.

This situation in other countries has brought about the establishment of what is known as "the bank rate," which is merely a nominal rate at which the bank announces that it will rediscount any amount of paper brought to it by the other banks of the community. It is not usually the rate at which discounting is being done for the public, that rate being known as "the market rate" or "the private discount rate." Market rate is usually lower than bank rate, which is largely a business barometer. When the bank rate is altered, as it is from time to time, the change is interpreted as an estimate of general business conditions by the directorate of the central institution, and as showing the prices that the banks of the community must pay if they find it necessary to apply for rediscounts. Bank rate is not the rate at which the central bank does business with the public, since it regularly competes with the other banks at the market rate.

Controlling the Gold Supply.—The second influence by which the leading foreign institutions prevent the appearance of difficulties is by a careful conservation of their supply of gold. This is accomplished in a variety of ways. The first is by raising the bank rate and through it the market rate to such a point that excessive withdrawals of gold from the vaults of the central bank, and from the country, are discouraged. Another method is by paying out bank notes rather than gold. The large foreign institutions also sell securities which they may chance to hold, receiving in return gold which is thus drawn into their own vaults and will be parted with only at a high price. Gold may be borrowed in the open market from other institutions, collateral security of one sort or another being furnished, when necessary. In many cases the competition for gold in the weekly public gold market at London becomes keen, and the prices rise to a high point. In a few cases also these banks advance gold, free of interest, to importers who agree

to reimburse the bank as soon as their shipments arrive. The importer thus saves interest during the period while the gold is in transit—an item which is one of the most important in determining importations. The Bank of Germany, the Bank of Belgium and the Bank of France also hold themselves ready at all times to sell foreign exchange at a point below the gold export point. They accomplish this by accumulating during easy times a supply of credits in foreign countries, against which they may later sell drafts.

Reserve Banks closely Limited by the New Law.—This brief recital of the methods used by the large banks in foreign countries suggests some of the devices that might be employed by the reserve banks. Their actions, however, are defined by the law and in it there is clear evidence of an intention to restrict them within close limits. One of the earlier drafts of the bill specifically denied to them the right to deal with any one except the government and member banks. As the Act finally passed this limitation was not included, but since there is no definite authority to deal with the public, except in certain specified particulars, it is safe to assume that direct borrowing and lending in the general market will not be sanctioned by the courts. There is a section of the Act devoted to what are called "open-market operations," and a careful reading of it will show that there are a number of different ways in which the reserve banks may deal with the public. There is, however, no authorization under which they may discount or lend directly to private individuals.

A discussion of the powers granted and the methods that may be used to prevent difficulties, or to correct them when they appear, may be taken up under two general heads: (1) the relations which the reserve banks may have with the general market, both in the United States and abroad, through which it may, from day to day, influence the money market; and (2) the devices by which it may, when necessary, protect its gold supply from withdrawals by other countries. The first of these topics will be treated

in this chapter and the second in the following one entitled "Control of the Gold Supply."

Dealings in Cable Transfers.—The first point of contact with the money market is in the authorization to "purchase and sell in the open market, at home or abroad, either from or to domestic or foreign banks, firms, corporations or individuals, cable transfers and bankers' acceptances and bills of exchange of the kinds and maturities by this Act made eligible for rediscount, with or without the indorsement of a member bank." This section clearly does not authorize the reserve bank to engage in domestic business to any great extent. Cable transfers have, of course, to do with foreign transactions. They are orders sent to or from a foreign country for the immediate delivery of cash. Because of their quick transmission they save the loss of time that is involved if an order is sent by mail.

The right to deal in these cables will give to the reserve banks the power to influence movements of cash into and out of the country that may at times be exceedingly valuable. The way in which this will be accomplished will be discussed in the next chapter, and at this point we may merely observe that the power to make such purchases (1) gives a convenient means of transferring funds to or from a foreign country, and (2) makes the reserve banks competitors of those institutions that now deal in foreign exchange. How successfully they may be able to compete with the older institutions is by no means certain.

Bankers' Acceptances.—The second of the items is bankers' acceptances. In Section 13 any member bank is authorized to "accept drafts, or bills of exchange drawn upon it and growing out of transactions involving the importation or exportation of goods having not more than six months' sight to run." Elsewhere attention has been called to the fact that this authorization to accept drafts will probably not be used extensively for the present. In so far as it is used, either in the present or in the future, it is confined to foreign transactions, and the acceptances bought by the reserve banks may be used in building up

foreign accounts, which may be of value in times of stress. The reserve banks may enter into active competition with the other banks for these acceptances and, if it can offer a better price, may be able to exercise considerable influence over the market for this paper and indirectly over other transactions.

Significance of Purchases of Bills of Exchange.—

Third on the list are bills of exchange, which must be only of the kinds acceptable for rediscount under the terms of the Act. As our banks may accept only drafts based on imports and exports, the bills that are here authorized must be either (1) acceptances by our banks, the drafts being drawn in connection with foreign trade, (2) drafts on foreign bankers or individuals, or (3) drafts on individuals within the United States. It is not necessary for any of them to have the endorsement of a member bank. The first of the three is the bankers' acceptance just described. The second group is much larger and includes all bills drawn on foreign banks and individuals. As the drafts may be bought from or sold to "domestic or foreign banks, firms, corporations, or individuals," the reserve banks may compete freely with all other banks in the field of foreign exchange. The third group is at present not a large one in the United States. The drawing of a draft on an individual often means that his credit is weak. Usually the creditor carries the obligation as a book account, perhaps offering a discount for cash within a specified time. To get this discount the debtor then borrows the amount from his bank on the security of his own commercial credit. The adoption of the system of drawing on debtors either at sight or on time would mean a radical reorganization of American business methods, but, if once introduced, would place the reserve banks in a position to compete effectively with the other banks for a large part of the public's business.

Buying and Borrowing Gold.—Five paragraphs at the end of the section on open market operations repeat a number of provisions found elsewhere in the Act but add several that are not stated in other sections. Those that are

repetitions are discussed in other chapters and need not be again examined. Of the new provisions of importance, the first is the right granted to reserve banks of dealing in gold coin and bullion, at home or abroad. When gold is scarce the reserve banks may bid for it at the weekly London gold auction or elsewhere, in competition with the other large banks of the world. Payment for the gold may be made in any form acceptable, but presumably with the proceeds from the sale of bills that have been held for this very purpose with its foreign correspondents or agencies. A second new provision is the right to borrow gold, giving, when necessary, acceptable security. This is similar to one of the practices of the Bank of England, and will be discussed in the next chapter.

Foreign Correspondents and Agencies.—A third authorization is the grant of power, "with the consent of the Federal Reserve Board, to open and maintain banking accounts in foreign countries, appoint correspondents, and establish agencies in such countries wheresoever it may deem best for the purpose of purchasing, selling, and collecting bills of exchange and to buy and sell with or without its indorsement, through such correspondents or agencies, bills of exchange arising out of actual commercial transactions which have not more than ninety days to run and which bear the signature of two or more responsible parties." The foreign agencies will furnish an advantageous outlet for exchange purchased in the United States and also a convenient means of keeping in close touch with foreign markets. Opportunity is offered through them of competing with foreign banks, but of much more value is the fact that these agencies will stand ready to purchase drafts on American bankers. As indicated in the chapter on "Foreign Acceptances" there may be some discrimination against "dollar drafts." Foreign agencies of our reserve banks will be able to counteract this influence and, by purchasing them, raise their standing.

Buying and Selling Securities.—The fourth and last important point of contact with the public is through the

power "to buy and sell at home or abroad, bonds and notes of the United States, and bills, notes, revenue bonds, and warrants with a maturity from date of purchase not exceeding six months, issued in anticipation of the collection of taxes or in anticipation of the receipt of assured revenues by any State, county, district, political subdivision, or municipality in the continental United States, including irrigation, drainage and reclamation districts." Competition with the other banks in the purchase of United States securities and a limited group of State and municipal securities is thus made possible. While this may be a disadvantage to some member banks and may perhaps result in better prices for some of the securities, the significance lies in the possibility of each reserve bank acquiring a supply of short-term bonds and notes which may readily be sold to replenish the cash reserves.

These various points of contact with the market do not at first sight appear of much importance. They contain, however, great possibilities for the future. Through the right to buy and sell exchange and certain securities, both at home and abroad, prices may be influenced, gold movements controlled and the standing of American banks in other countries raised. Doubtless the extension of American trade will also be encouraged if drafts on United States banks are given more recognition. Control over the money market in the United States will depend largely on whether American business men will modify their present methods, substituting the draft for the statement of account as a means of collection. Perhaps with a little encouragement from the reserve banks this may be brought about, but such an outcome appears less probable when we remember that the reserve banks will be managed by the bankers themselves. Unless forced to do so by the Reserve Board they are not apt to encourage such competition.

CHAPTER XVIII

CONTROL OF THE GOLD SUPPLY

Domestic Withdrawals the Least Serious.—Withdrawals of gold from the reserve banks can be classified under two general heads. In the first place there are the withdrawals occasioned directly or indirectly by the operations of the member banks in handling domestic business. These withdrawals are the less dangerous, because the gold has merely been shifted from one part of the banking system to another. The system may not have been seriously weakened thereby, and from past experience it seems reasonable to presume that so long as the gold remains within the United States it is merely a question of time until it will return to the reserve banks. When the special demands of business are over, the money will no longer be needed to finance trade. If panic has caused the withdrawals, the disappearance of fear will end hoarding. The gold will then return to member banks and will be deposited by them with the reserve institutions in the same proportions as before.

Far more serious is the second drain upon the gold supply of the reserve banks. If the gold leaves the United States, its recovery is not so easy. As we have already explained, the leading countries of the world employ numerous devices to control their supplies of gold and to attract more in time of need. Gold does not flow from one nation to another purely in response to trade demands, nor does it move merely when exchange rates are favorable. At times it will be firmly held and often it is arbitrarily attracted by inducements that have no immediate connection with commercial needs. To offset foreign operations our new law introduces a number of features which are intended to aid us in conserving our stock of gold and even to make possible additions to the supplies on hand. In earlier chapters some of these have been mentioned, but usually in connection with other problems. Hence a re-

statement showing their bearing upon the prevention of gold importations is in order.

The Discount Rate as a Protection.—First and most important is the right of reserve banks to establish a rate of discount sufficiently high to discourage extensive rediscounting. The value of this in checking loans within the United States has already been pointed out. Raising the discount rate results in raising the interest rate at which business men can borrow. This discourages a further expansion of loans. The effect of the higher discount rate is not limited to local business. One of the most important results is to discourage foreign institutions from borrowing here to lend abroad. It will in addition make it less profitable to withdraw any accounts they may already have with banks here. If there is any hesitancy on the part of the directors of the reserve bank to take such action, the Federal Reserve Board may compel it—a fact of much importance since the majority of the directors of any reserve bank are chosen by the member banks, and hence might be averse to an increase in the discount rate which their own banks are charged for accommodations.

Since the member bank securing the notes gets them only by rediscounting commercial paper, the majority of that paper will compel settlement with the reserve bank for the amount originally secured. Other commercial paper may be offered by the reserve bank if such a substitution is acceptable to the Federal reserve agent, or the amount due must be paid in cash. If the notes originally issued have been redeemed for gold, some other form of cash may be presented. Perhaps gold will be included, and thus the gold supply of the reserve banks will be restored; or if other forms of money are offered, they may be redeemed by the reserve bank at the Treasury in gold and thus the same purpose accomplished.

Federal Reserve Notes May Cause Gold Exports.—This seems to indicate that there is little to fear from gold withdrawals through rediscounting, but in practice there may be difficulty. Some of the provisions of the law may actually force presentation of the notes for redemption.

Gold may thus be secured for export, and when it leaves the country its return is difficult to secure, even though our needs may be great. Thus the issue of reserve notes under the conditions that are imposed may not be a help in controlling our gold supply, but may even be a hindrance. Congress attempted to prevent inflation of credit by not allowing the use of the reserve notes as legal reserves. The result may be to hasten their redemption in gold or other lawful money before the maturity of the paper discounted to secure them. If gold should be withdrawn and exported, it may be necessary for the Federal Reserve Board to check the movement by raising still further the discount rate, or by applying some one of the other methods later described.

Buying Gold and Selling Securities.—A third influence is the power to buy gold abroad. This gold may be purchased by means of credits secured by the purchases of foreign bills described in the preceding chapter. The gold will be held abroad unless the condition of the foreign exchange market makes it more profitable to import it rather than sell drafts against it, or unless the reserve bank desires to increase its stock of gold. Still another resource is the power to sell some of its securities. This ability is one of the most important possessed by the Bank of England, which frequently sells large quantities of consols, the standard British government bond. In our new Act the one-year three per cent United States notes, for which the two per cent United States bonds may be exchanged, are the most important salable asset at such times. They mature within one year, can always be sold at near par, and hence will be more available at such times than long-term bonds. The fact that they mature so soon, however, is also a disadvantage, since the reserve bank is obligated by an agreement with the Treasury Department to purchase other notes at the maturity of the ones under discussion, if the Secretary of the Treasury desires it.

Next in importance are the short-term State and municipal securities described in the last chapter. While not so good as United States notes they will always bring a fair price. Reserve banks may also borrow gold, giving, when

necessary, acceptable security. This borrowing may be done in the home market or abroad. If done abroad it will make possible the sale in the United States of exchange below the export point and thus prevent a movement of gold out of the country. If purchased in the United States the gold supply of the market will be turned into the hands of the reserve banks, and released again only on such terms as they may choose to impose. This will result in raising the general discount rate within the United States, and gold exports will be discouraged. The collateral offered for the loan will probably be United States and municipal securities.

Accumulating Foreign Accounts.—Still another power in the hands of the reserve bank is that of creating foreign accounts against which exchange may be sold whenever necessary. Reserve banks, whenever they have available funds, may make these investments in the foreign markets, holding the bills until maturity, or discounting them if they prefer. These accumulations abroad will be available for use later in time of need. Some of the reserve banks, for example one in New Orleans, would find this an easy method to employ. At certain seasons of the year large quantities of cotton bills can be purchased, thus furnishing a considerable supply of London exchange. These bills could be discounted at once in London and drafts sold against the proceeds. If the funds are not needed in the United States immediately, the bills may be held until maturity and, if advisable, even reinvested in the market until wanted at home. The open discount market in Europe makes easy the purchase and sale of such bills. This introduces the reserve banks into the banking field as competitors, to a slight extent, with the foreign exchange houses, and raises the question of their ability to compete successfully. It is, of course, dependent upon whether or not they will be in a position to buy and sell on better terms. It is useless to hazard an opinion on such a point, but it is well to remember that the present foreign exchange houses have large resources and are firmly established both in the United States and with their foreign connections.

Suspending Reserve Requirements.—An extreme method that may never be employed, but will be at hand if needed, is the power of the Federal Reserve Board to suspend, subject to stipulations, any and every reserve requirement in the Act. This covers the reserves of the reserve banks and the reserves of members. A graduated tax must be imposed on such deficiencies as are allowed, and the amount of the tax on the deficiency in the gold reserve behind the reserve notes is specified. Such an authorization is intended for use only in extreme emergencies and may be compared with the practice of the Bank of England on a few occasions in breaking the Bank Act.

Coöperation among Reserve Banks.—We have spoken throughout as if each reserve bank was the only one in the country. There may be as many as twelve, and upon some of them the drains for gold will be heavier than upon others. The one located in New York, which is our great import and export center, will doubtless feel the demand more than others and should fortify itself with care against withdrawals. A bank located at an interior point would ordinarily find the pressure less strong. In case any difficulty should appear in a given district, the mere fact that its organization is distinct from that of the other districts will tend to localize the trouble. If it becomes too intense, the reserve bank of that district may ask for help from one of the other reserve banks, and the Federal Reserve Board may permit or even require such help to be given. The method will be through the second reserve bank rediscounting some of the paper held by the first. This compulsion by the Federal Reserve Board may be exercised only upon the vote of at least five of its members, and the rediscount is to be at a rate fixed by the board.

Effectiveness of the Available Methods.—Will these means of controlling the gold supply be effective? Our investigations show that the Act legalizes the use of nearly all the important methods employed abroad. Their effectiveness, however, will depend on exactly the same considerations as will the success of other parts of the law. Mem-

ber banks will not always find it to their advantage to use the checks at their disposal to conserve the gold supply, for at times more will be gained by them individually through a different policy. Since they manage the reserve banks through their election of two-thirds of the directors, there may be fatal delays in using the forces at hand.

Here, as elsewhere, safety lies in the good judgment and unselfishness of the bankers, especially of those on the directorates of the reserve banks, and in the judgment, firmness and tact of the Federal Reserve Board. The chief weakness is in the possibility of friction, which may develop if one reserve bank is compelled to rediscount for another. Much has been made of this from time to time in the public press, and considerable attention was given to it in the hearings before the Congressional committees. It seems probable that the difficulty has been exaggerated. The banks of certain sections of the country already borrow heavily from other sections, and little is thought of it. New York does not trouble itself over the fact that relief is given to the South each fall when that relief is needed. There will be no more cause for such sectional jealousy in the future than in the past, and just so long as each of the reserve banks is conducted with conservatism, there should be no legitimate reason for the refusal of any other to give aid whenever it is needed. Moreover, the discount rate imposed by the Federal Reserve Board at such times will be high enough to make the giving of assistance profitable.

On the whole, our foreign exchange situation will be strengthened. We have been in the past almost helpless against withdrawals of gold. In fact, it has sometimes been said that our market is the only free market for gold in the world. It certainly has been one from which gold could very readily be withdrawn when other countries desire it, but not one to which gold could be attracted as readily as to most other large markets. Under our new law there should be a change for the better.

CHAPTER XIX

GOVERNMENT DEPOSITS AND THE RELATIONS OF THE RESERVE BANKS TO THE GOVERNMENT

Reasons for the Independent Treasury System.—A very important feature of the Federal Reserve Act concerns the relations of the regional banks and the Federal Reserve Board with the United States government. For many years the banks of this country have conducted a persistent agitation for the abolition of the Independent Treasury system. It has been their contention that the Independent Treasury was an archaic and inefficient system of administering the finances of the nation; that it worked serious hardship upon the banks and the business of the country, and that any system of reform should include its abolition.

The Independent Treasury was established in 1846. Upon the expiration of the charter of the Second Bank of the United States, the government adopted a plan of depositing its funds in certain State banks selected by the Secretary of the Treasury. With the collapse of the State banks, following the era of wildcat banking, the people realized the danger to which the government's funds were subjected, and Congress established the Independent Treasury. The Treasury is, in reality, a central bank of deposit, with branches, run by the government, in which the government is the only depositor, and from which there are no borrowers. The central office of the Treasury is situated in Washington, while there are ten subtreasuries or branches scattered among the various large cities of the country. The most important subtreasury, from the stand-point of the volume of business handled, is located in New York City.

Until a few years ago the entire receipts of the government were deposited in the Treasury or in its branches, and the disbursements were made by warrants drawn by the Treasury Department upon the balances held in the Treas-

ury. These warrants were deposited in the banks and were collected by them in accordance with the regulations then prevailing. The subtreasury in New York City has for many years been a member of the New York Clearing House, and warrants drawn upon it and certified checks which it receives in payment of customs dues, etc., are cleared through the clearing house in the same way as though the subtreasury was one of the banks of New York City. The United States is the only large nation in the world which has a treasury system of this sort, and this fact has been made much of in the agitation for its abolition.

Difficulties Arising from the Treasury System.—There is no room for dispute that many features of the Independent Treasury have, in the past, been the source of serious difficulties. However, we must recognize that within the last decade, and particularly within the last two or three years, most of the glaring defects have been eliminated through a liberalization in methods, involving, in brief, a deposit of a very considerable amount of the government's money in national banks rather than carrying it locked up in the vaults of the Treasury, through more liberal administrative regulations by which payments to the Treasury could be made with certified checks, and through facilitating in other ways the transactions of business men with the Treasury Department.

Treasury System to be Preserved.—Inasmuch as the Treasury system is to be preserved, it is necessary to review briefly the defects which are alleged to exist in it. The gravest objection which has been raised is that it is a device which locks up a great deal of money, taking it out of the channels of trade, making it unavailable to conduct the business of the country, and having the same effect on the banking situation as would the hoarding of an equal amount of money by thousands of short-sighted individuals. This money is sequestered in the Treasury, not because of any hostile designs upon the part of the Secretary of the Treasury, of the administration in power, or of Congress, but as the result of the fiscal operations of the government. The

government's finances are, in their general outlines, very similar to those of a business firm or of an individual. There must of necessity be some relation between the income and the expenditures, and while the expenditures are, to a large degree, controlled by the revenues of the government, yet it is impossible, even though Congress should endeavor to do so, to effect a nice adjustment so that the net balance on hand would always be about the same amount. From time to time, because of political exigencies, changes are made in the various forms of taxation, such as changes in tariff duties, internal revenue duties, the establishment of an excise or corporation tax, or an income tax. The Treasury experts are called upon by Congress to furnish information concerning the probable revenue which will be derived from this proposed taxation; but no matter how careful may be their investigation, it is impossible to foretell accurately the receipts which will be forthcoming. In addition, a large proportion of the government's income is dependent upon the activity of trade and business. When trade conditions are brisk, importations are large, and the customs duties consequently heavy; and the same is true, though to a much less extent, of a large proportion of the internal revenue taxes. Therefore, the revenues of the government fluctuate considerably from year to year, even upon the same basis of taxation. Under these conditions, and because the end and aim of the government is not to spend all of the money which is derived by taxation, it follows that, at times when the receipts are unusually large, the balance in the Treasury will run up. On the other hand, when revenues are slim, as during the first few years of the Taft administration, the Treasury balances will decrease because Congress is spending more money than the government is receiving. It happens that these conditions run counter to the desires and wishes of business. The era of large receipts is the era of business prosperity, in which the banks are subjected to a heavy strain in financing the increased business transactions of the country. The large balances which are created in the Treasury, it is argued,

represent money drawn out of the banks at the time when they most need it and when its withdrawal weakens the whole fabric of the banking situation, bringing about a condition which makes a collapse possible at any time.

Hoarding of Money through Treasury Operations.—On the other hand, the period in which the government's income is reduced is, unfortunately, a period of depression; and the transferring of a considerable amount of money to the banks is, at such times, a curse because it adds to the idle funds then on hand in the banks for which no safe employment can be found, owing to the passivity of business conditions, makes money a drug, encourages speculation and creates unhealthy conditions which tend still further to prolong the depression.

This theory is exceedingly plausible, and is, to some degree, based on fact. Nevertheless, an examination of the statistics will show that the Treasury balances do not fluctuate to as large an extent as would be indicated by the above argument. The following figures, taken from the report of the Comptroller of the Currency, show the relative amount of money in the Treasury, controlled by banks, and in circulation during the period from 1902 to 1912:

Year ended June 30.	Coin and other money in Treasury as assets.	Coin and other money in reporting banks.	Coin and other money not in Treasury or banks.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
1902	12.24	32.69	55.07
1903	11.80	31.59	56.61
1904	10.14	35.06	54.80
1905	10.24	34.27	55.49
1906	10.86	32.92	56.22
1907	11.00	35.51	53.49
1908	10.08	40.34	49.58
1909	8.81	42.40	48.78
1910	9.27	41.37	49.36
1911	9.61	43.46	46.93
1912	9.98	42.86	47.16

It will be seen, as a matter of fact, that the Treasury balances steadily decreased throughout the entire period from 1901 to 1907, which was a period of very great business activity; whereas, under the theory, there should have been

a very considerable increase. At the same time, it will be observed that the amount of money in the control of the banks considerably increased, particularly in the years immediately preceding the panic of 1907. Finally the Comptroller's statistics indicate that the money that was presumably in circulation among the people increased up to the time of the panic in 1907, and that this was a more serious problem than the absorption of money by the Treasury.

Correspondence of Treasury Receipts and Disbursements.—It is not sufficient, however, to be content with an examination of the average balances in the Treasury by years, for this is of little significance other than as showing the general situation which the Treasury problem introduces over a long period of time. The real criticism against the Treasury is that it causes the tying up of money, not over a series of years, but during the months in which the banking system of the country most needs it. This condition is the result of the lack of correspondence between government receipts and disbursements.

During the first four months of the year the receipts are less than in any other period. During the month of May, the receipts sharply increase, reaching their maximum about the first of June, and continuing at a very high rate over that month. In July the income falls off, reaching by the end of the month a point a little above that which prevailed in April, after which it gradually increases during August and September. About October first the tide turns and the receipts fall off sharply during that month, while during December the revenue again increases. As contrasted with this the government expenditures change only in a general way. Beginning with large disbursements at the first of the year, they decline over the month of January, are practically stationary in February, increase slightly in March, only to fall off again in April, a decrease which is followed by a much sharper decline in May, the low point for the year being reached at the end of the month. During the month of June there is a very sharp increase, which reaches the maximum for the year on July 1. During July there is

a correspondingly sharp decline, followed by a more moderate reduction in August. The tide turns upward again in September and reaches the maximum on the first of October, from which there is a gradual decline during the balance of the year.

The following table shows the receipts and disbursements of the government for each month during the fiscal year of 1912-13, excluding Panama canal financing. The year is fairly typical:

Month.	(000 omitted)	
	Ordinary receipts, exclusive of postal.	Ordinary disbursements, exclusive of postal, principal of debt, and premium.
1912—July	\$59,536	\$60,279
August	60,205	63,315
September	55,682	58,446
October	64,469	60,606
November	59,069	54,241
December	55,821	59,417
1913—January	60,542	53,605
February	54,803	52,839
March	56,720	51,478
April	53,452	57,106
May	55,370	57,957
June	88,438	53,476
Total for 12 months	\$724,111	\$682,770

Exaggeration of Treasury Evils.—It should be stated that whatever embarrassment exists because of this condition, and which as a matter of fact has been grossly exaggerated, is found almost entirely in New York City.

However, in order to reduce as much as possible the objections raised by the bankers and to prevent money being taken out of circulation and buried in the Treasury, where it would be of no service to the country, the Secretary of the Treasury, on January 9, 1913, issued the following order, which inaugurated a radical change in the manner of handling and disbursing the public funds. The objects to be accomplished were announced in the order as follows:

“For the purpose of bringing the ordinary fiscal transactions of the Federal Government more nearly into harmony with present business practices, it has been determined

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that the daily receipts of the government shall be placed with the national bank depositaries to the credit of the Treasurer of the United States. Disbursements will be made by warrant or check drawn on the Treasurer, but payable by national bank depositaries, as well as by the Treasury and subtreasuries."

Secretary McAdoo, in his report for the fiscal year ending June 30, 1913, in speaking of this, stated that while it had caused some embarrassment "the difficulties at first encountered are disappearing, and the system appears to respond to the public requirements, and to be accomplishing the purposes for which it was devised."

Division of Treasury Funds.—The Treasury funds may be said to consist of two main parts, the one known as the gold reserve and the currency trust fund, having to do with the keeping of a store of gold for the purpose of supporting the value of paper money and silver dollars in circulation; and the other, known as the general fund, consisting of the available balance of the Treasury, representing funds available for the payment of debts of the government. The Treasury Department issues daily a statement showing in detail the status of both of these departments. The form of this statement is shown by the following reproduction of the statement as of January 3, 1914:

DAILY STATEMENT OF THE UNITED STATES TREASURY

AT CLOSE OF BUSINESS JANUARY 3, 1914

CASH ASSETS AND LIABILITIES

GENERAL FUND

CASH:

Assets

In Treasury Office—

Gold coin	\$21,375,295.06
Gold certificates	88,140,510.00
Standard silver dollars	1,878,473.00
Silver certificates	13,860,852.00
United States notes	6,954,720.00
Treasury notes of 1890	5,452.00
Certified checks on banks	899,007.10
National-bank notes	36,011,439.10

NOTE.—This includes \$33,036,259.10 which the Treasury has redeemed and for which it will receive payment from national banks.

GOVERNMENT DEPOSITS

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Subsidiary silver coin	\$14,568,605.55
Fractional currency	348.77
Minor coin	1,145,639.78
Silver bullion (available for subsidiary coinage)	1,518,389.43

\$186,358,731.79

In National-bank Depositories—

To credit of Treasurer United States	84,544,226.87
To credit of postmasters, judicial officers, etc..	7,100,038.11

In Treasury Philippines—

To credit of Treasurer United States	3,006,590.21
To credit of disbursing officers	4,055,308.09

Total \$285,064,895.07

Liabilities

CURRENT LIABILITIES:

In Treasury Offices—

Disbursing officers' balances	\$69,315,667.67
Outstanding warrants	1,144,179.05
Outstanding Treasurer's checks	6,262,684.27
Post Office Department balances	9,525,336.49
Postal Savings balances	1,491,621.27
Judicial officers' balances, etc.....	8,623,747.90
National-bank notes: Redemption fund *	17,063,078.50
National-bank 5 per cent fund	31,270,753.61
Assets of failed national banks.....	14,020,161.93
Coupons and interest checks	3,309,074.02
Miscellaneous (exchanges, etc.)	10,809,564.50

Total \$172,835,869.21

Subtract: Checks not cleared 10,827,851.67

\$162,008,017.54

In National Depositories—

Judicial officers' balances, etc.....	7,100,038.11
Outstanding warrants	223,529.98

In Treasury Philippines—

Disbursing officers' balances	4,055,308.09
Outstanding warrants	1,677,014.09

\$175,063,907.81

Net balance in general fund 110,000,987.26

Total \$285,064,895.07

* The act of July 14, 1890, provides that deposits made by national banks to redeem circulating notes shall be covered into the Treasury as miscellaneous receipts and that the Treasury shall redeem from the general cash the circulating notes which come into its possession subject to redemption.

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THE CURRENCY TRUST FUNDS, THE GENERAL FUND, AND THE GOLD RESERVE FUND

Assets

CURRENCY TRUST FUNDS:

Gold coin	\$865,751,495.00
Gold bullion	254,614,474.00

Total gold	\$1,120,365,969.00
Silver dollars	489,620,000.00
Silver dollars of 1890	2,553,000.00

Total currency trust funds \$1,612,538,969.00

GENERAL FUND:

Total cash assets, as above 285,064,895.07

GOLD RESERVE FUND:

Gold coin	100,000,000.00
Gold bullion	50,000,000.00

Grand total cash assets in Treasury..... \$2,047,603,864.07

Liabilities

OUTSTANDING CERTIFICATES:

Gold certificates outstanding	\$1,120,365,969.00
Silver certificates outstanding	489,620,000.00
Treasury notes outstanding	2,553,000.00

Total outstanding certificates \$1,612,538,969.00

GENERAL FUND, LIABILITIES AND BALANCE:

Total liabilities, as above 175,063,907.81

Balance in general fund, as
above \$110,000,987.26

GOLD RESERVE 150,000,000.00

NOTE.—Reserved against \$346,681,-
016 of U. S. notes and \$2,553,000 of
Treasury notes of 1890.

Total net balances 260,000,987.26

\$2,047,603,864.07

The General Fund.—The general fund consists of two parts: first, the cash in the possession of the United States Treasury or in the various subtreasuries, and second, deposits of the Treasurer in the national banks and in the

Treasury of the Philippine Islands. Upon the day in question there were some \$186,000,000 of cash on hand and some \$99,000,000 of funds on deposit to the credit of the United States, a great majority of which was in the custody of the national banks, which had been selected by the government as depositaries.

One feature of the general fund account deserves separate treatment. The National Bank Act requires each national bank having circulation outstanding to keep on deposit with the United States Treasury a redemption fund, which shall at all times equal in amount at least five per cent of the then outstanding circulation of the bank. The redemption fund is intended to provide the Treasury with funds necessary to redeem the national bank notes when they are presented for retirement. As a matter of fact, for many years the fund has been continually overdrawn, the government having advanced, in the year 1911-12, a sum in the neighborhood of \$12,500,000 from the general fund of the Treasury, for the purpose of redeeming the notes of national banks returned for redemption, over and above the amount of money on deposit by the national banks of the country for this purpose.

In the chapter on "Note Issues" the reasons for the remarkably large volume of national bank notes which are presented for retirement are considered in detail. It is sufficient to say here that the large overdrafts in connection with the five per cent redemption fund are due to the fact that nearly ninety per cent of the national bank notes go through the redemption agency each year.

Under the provisions of the National Bank Act the amount of money to the credit of a bank for the redemption fund account could be counted by the bank as a part of its cash reserve. Since the signing of the Federal Reserve Act by the President, on December 23, 1913, it is impossible for a bank in calculating its reserve to include the five per cent redemption fund. The clause of the Act covering this point reads as follows: "So much of Sections 2 and 3 of the Act of June twentieth, eighteen hundred and seventy-four, en-

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titled 'An Act fixing the amount of United States notes, providing for a redistribution of the national bank currency, and for other purposes,' as provides that the fund deposited by any national banking association with the Treasurer of the United States for the redemption of its notes shall be counted as a part of its lawful reserve as provided in the Act aforesaid, is hereby repealed. And from and after the passage of this Act such fund of five per centum shall in no case be counted by any national banking association as a part of its lawful reserve."

The Trust Funds.—In addition to the general fund there exist two other important funds: the currency trust fund and the gold reserve fund. The currency trust fund is, as its name implies, a trust fund held by the Treasurer to meet the requirements of the law concerning certain forms of our paper money. A very large proportion of the gold in use in the banking system in this country is used in the form of gold certificates. These gold certificates are in reality nothing but warehouse receipts, issued by the United States Government, certifying to the fact that the government holds on deposit in the Treasury a certain number of dollars in gold, which will be paid to the bearer upon demand.

On January 3, 1914, the first portion of the currency trust fund consisted of gold coin and gold bullion aggregating an amount of \$1,120,000,000, against which there is outstanding an identical amount in gold certificates. The second portion of the currency trust fund consisted of the deposits of silver dollars against the silver certificates and Treasury notes outstanding. These deposits of gold and silver must be held intact, separate and apart from the other funds in the Treasury, for the purpose of meeting the requirements of the law and keeping the pledge of the United States written upon the paper issued and outstanding.

The Gold Reserve.—The gold reserve fund consists of \$150,000,000, of which \$100,000,000 is gold coin and \$50,000,000 is gold bullion, although the proportion of bullion

in the latter amount is discretionary with the Treasury Department. The \$150,000,000 gold reserve was established by the Act of Congress of March 14, 1900, entitled "An Act to define and fix the standard of value and maintain the parity of all forms of money issued or coined by the United States, to refund the public debt, and for other purposes." This is popularly referred to as the Gold Standard Act. It provides that all legal tender notes shall be redeemed for gold coin on demand, and that the Treasurer shall keep a reserve at all times equal to at least \$150,000,000, to consist of gold coin and bullion, for the purpose of redeeming such notes as may be presented and for no other purpose. Notes which are redeemed out of this fund may be reissued only in exchange for gold. If the fund at any time falls below \$100,000,000, the Secretary of the Treasury is directed to restore it to the maximum sum of \$150,000,000 by the sale of bonds, the proceeds from the sale of such bonds not to be used, under any circumstance, to meet deficiencies in current funds. The provision that notes shall be reissued only in exchange for gold has never worked as a check against the reissuing of the legal tender notes; for it is the practice, when these notes are presented for redemption through the gold reserve fund, for the Treasury Department to place them among their assets in the general fund, taking therefrom an amount of gold coin or gold certificates equal in amount to the legal tender notes so transferred. Thus the letter of the law is complied with, if not the spirit.

Gold Standard Reaffirmed.—In order that no doubt might arise in the mind of any one concerning the effect which the Federal Reserve Act had upon the Act of March 14, 1900, the following provision was inserted in the new law: "Nothing in this Act contained shall be construed to repeal the parity provision or provisions contained in an Act approved March fourteenth, nineteen hundred * * * and the Secretary of the Treasury may, for the purpose of maintaining such parity and to strengthen the gold reserve, borrow gold on the security of United States bonds authorized by Section 2 of the Act last referred to, or for one-year

gold notes, bearing interest at a rate of not to exceed three per centum per annum, or sell the same if necessary to obtain gold. When the funds of the Treasury on hand justify, he may purchase and retire such outstanding bonds and notes."

The gold reserve fund supports \$346,681,016 of United States notes, and on January 3, 1914, \$2,553,000 of Treasury notes of 1890. While there has been from time to time some agitation for the retirement of the United States notes, on the ground that a large proportion of them represent nothing but the promise of the United States to pay money and might cause trouble in the future, yet the movement has not been strong enough to have any definite results.

The Federal Reserve Act will make possible a radical revision of the methods of the Treasury Department and the position of the Independent Treasury as regards the banking system of the country.

Effect of Reserve Act on Treasury Methods.—Section 15 of the Act reads as follows: "The moneys held in the general fund of the Treasury, except the five per centum fund for the redemption of outstanding national bank notes and the funds provided in this Act for the redemption of Federal reserve notes may, upon the direction of the Secretary of the Treasury, be deposited in Federal reserve banks, which banks, when required by the Secretary of the Treasury, shall act as fiscal agents of the United States; and the revenues of the Government or any part thereof may be deposited in such banks, and disbursements may be made by checks drawn against such deposits.

"No public funds of the Philippine Islands, or of the postal savings, or any government funds, shall be deposited in the continental United States in any bank not belonging to the system established by this Act: Provided, however, That nothing in this Act shall be construed to deny the right of the Secretary of the Treasury to use member banks as depositories."

A careful analysis of this section brings out some very important matters. In the first place, the five per cent redemption fund must, under all circumstances, remain in

the vaults of the Treasury Department, and the Secretary of the Treasury is required to deposit the public funds of the Philippine Islands or of the postal savings, or any government funds, only in banks in the continental United States, which are a part of the Federal reserve system. The Act does not prevent the Secretary of the Treasury continuing the present deposits with the national banks, a fact which has apparently been overlooked by many bankers in discussing the effect which the new law will have upon their affairs. As to whether the Secretary will see fit to transfer the balances in the member banks to Federal reserve banks or to the Treasury we will leave for subsequent discussion. It is singular that so little attention was given, while the bill was before Congress for consideration, to the very large powers conferred upon the Secretary of the Treasury, concerning the place in which government funds should be kept.

Great Power of Secretary of the Treasury.—For many years criticism has been leveled against the policy of Secretaries Shaw, Cortelyou and McAdoo, concerning the large amount of power and discretion lodged in the hands of these officials over the vast sums of money representing the balances in the general fund of the government, which if wisely used by them might assist business in the country, but which if improperly used would bring chaos and disorder throughout the entire banking world. However great may have been the power of the Secretary heretofore, it pales into insignificance as contrasted with the authority vested in him by virtue of the Federal Reserve Act. He is a power supreme and unaccountable to any authority other than the President, Congress, and, indirectly, the people of the nation. In order that there may be no doubt as to the supreme authority of the Secretary of the Treasury, the following provision was inserted in the tenth section: "Nothing in this Act contained shall be construed as taking away any powers heretofore vested by law in the Secretary of the Treasury which relate to the supervision, management, and control of the Treasury Department and bureaus under such department, and wherever any power vested by

this Act in the Federal Reserve Board or the Federal reserve agent appears to conflict with the powers of the Secretary of the Treasury, such powers shall be exercised subject to the supervision and control of the Secretary."

What discretionary powers does the Secretary possess? In the first place, it is optional with him as to exactly where he shall keep the balances of the government. He has three options. First, he may keep them in the vaults of the Treasury Department, as was done for so many years by his predecessors. Second, he may deposit all or any part of the general fund (not including the redemption fund), as he sees fit, with the member banks. Finally, if he so elects, he may transfer the balances deposited with the member banks to the Federal reserve banks, and may, at the same time, transfer the entire general fund, excluding the five per cent redemption fund, to the Federal reserve banks. Nor does his authority end when he has elected where he shall carry the general fund. At any time when he sees fit he can transfer the money from one depository to another, and there is no authority granted by the Federal Reserve Act to any one to review or veto such transfer.

Secretary of the Treasury and the Reserve Bank.—The Secretary of the Treasury is given absolute discretion as to how much money shall be carried in any Federal reserve bank. The balance which he carries with the Federal reserve bank is not determined by the revenue which the government derives from taxation in the region presided over by that institution, nor does the Secretary have to make distribution from the particular reserve bank in the district where the government's creditor does business. This great power may be used beneficently or foolishly, depending upon the character, ability and experience of each particular Secretary of the Treasury.

As an illustration of the way in which it can be used to the advantage of the country, let us see how the Secretary can coöperate, if he so desires, in getting the Federal reserve banks into operation with the smallest amount of disturbance to business. At the present time he has at his disposal

between \$150,000,000 and \$200,000,000 in the general fund, which he may transfer in whole or in part to the regional banks for the purpose of increasing their assets and rendering them of greater value to the business community. It is anticipated that the government deposits in the beginning will be almost one-half of the aggregate resources of the Federal reserve banks. If the Secretary of the Treasury carefully studies the needs and the probable demands which will be put on the Federal reserve banks, he can so deposit this money among them as to help those institutions upon which heavy demands will be made, without having a large amount of idle money in the vaults of the other reserve banks upon which no strain will be placed, thereby saving them from any temptation toward laxity.

Importance of the Calibre of the Treasury Head.—Again the Secretary of the Treasury can to a large degree save the Federal Reserve Board from the criticism which will inevitably arise when it becomes necessary to transfer funds from those reserve banks having a large surplus to the institutions upon which undue pressure is then being brought, by the simple expedient of transferring a portion of the government balances from the reserve banks having a surplus to those in need of aid. These two illustrations indicate the great power for good which the Secretary can exert.

On the other hand, the power for evil is fully as great; for with a short-sighted, partisan or provincial Secretary the entire Federal reserve system could conceivably be badly disorganized. He could punish a section whose political tendencies were distasteful to him by transferring the government balances from that reserve bank to one then in favor with him. If he lost his head in times of panic he could wreck the entire banking system of the country by suddenly demanding the refund of the government deposits by all of the reserve banks. It is not intended to convey the impression that the Secretary of the Treasury will ever be so foolish as to do anything as serious as has been indi-

cated. After all, the great controlling force which will regulate, not only the actions of the Secretary of the Treasury, but also the policy of the Federal Reserve Board and of the member banks, is intelligent public opinion and dispassionate and scientific criticism of the methods currently pursued in the management of the banking business of the country. An administration which would allow a Secretary to commit any of the serious blunders which we have previously sketched, would thereby be signing the political death warrant of its party.

Should the Secretary of the Treasury Have Such Wide Latitude?—Why should the Secretary of the Treasury be given such wide latitude in the administration of the Treasury Department? It can be argued with considerable force that the money in the vaults of the Treasury is useless to support and accelerate business, and that it is an economic loss to the nation. Would it not be better to require the Secretary of the Treasury, as was provided in the original draft of the bill, to deposit his funds with the regional banks, leaving to the Federal Reserve Board the responsibility of dividing this money among these banks in the way which would bring about the greatest national good? This course would obviate any clash of authority between the Federal Reserve Board and the Secretary of the Treasury, and would enable that official to devote his entire attention to the detailed affairs of the government, thus eliminating a great deal of uncertainty and removing to a large extent the possibility of disturbance in the Federal Reserve system as a result of politics. On the other hand, it can be argued with equal force that the Secretary of the Treasury is not a mere clerk, but the responsible executive head of an important department of the government, and that, if he is fit for his great office, he can be trusted to have discretion, judgment and ability.

In spite of all the care which has been taken in planning the Federal Reserve system, it will nevertheless for some years be an experiment to entrust the general fund of the government to the Federal reserve banks. To give the Secre-

tary of the Treasury no control whatever over this money would be to deprive him of any opportunity to protect the interests of the government, in case any bank should be improperly managed. The problems which must be solved by the directors of the Federal reserve banks are different in character from those which must be passed upon by the directors of member banking institutions. They include many questions concerning which the regional bank director is ignorant. They involve a careful study of the entire banking situation in this country, and indeed of the world, and an intimate knowledge of many questions concerning which a large proportion of these directors will, at the beginning, have very little information. It will require years to educate the bankers of the country to an understanding of the larger problems of banking which some of them will be called upon to handle. It is reasonable to presume that the Federal reserve banks will be successful, that none of them will become insolvent, and that no depositor will lose his money.

Congress was not of a temper to put the funds of the government at the mercy of an untried group of bank directors, and to make the Secretary of the Treasury subservient to them in the handling of the government's money. Time will show whether the judgment of Congress was sound. The test will never come if the right type of men are appointed to the office of Secretary of the Treasury.

CHAPTER XX

THE RESERVE PROBLEM

Our Unscientific Reserves.—The most serious defect in our banking system is the unscientific and ineffective system of handling the reserves of the twenty-five thousand banks in the country. As was pointed out in the preliminary analysis, the reserves of this country are decentralized to a greater extent than in any other country in the world, and with this decentralization has gone a lack of elasticity which makes it inevitable that our banking system will break down whenever it is subjected to a severe strain.

The consensus of opinion among the bankers who appeared before the Congressional committees was that the most vital problem in the Federal Reserve Act was the mobilization of the reserves of the banks of the country. Mr. Vanderlip, in his testimony, states that in his opinion "the most important thing that we need is the mobilization of reserves." Mr. A. F. Dawson, President of the First National Bank of Davenport, Iowa, declared that in his opinion "this question of reserves is really the vital question." Mr. J. F. Scott, Vice-President of the First National Bank of Houston, Texas, said "the main object of creating those Federal reserve banks is to mobilize the present scattered reserves of the banks of the country into some central points where they can be utilized in a legitimate way, instead of, as under the present system, locked up in the several thousand separate banking institutions of the country, serving no useful purpose, either in times of commercial prosperity or in those of business depression. The reserves thus mobilized will form a fund as a basis for discounting commercial obligations of credit and furnishing against the same, through the subscribing member banks, such circulating notes as may be required at the hands of commerce."

The Present Reserve System Explained.—If we are to understand the radical change which will be worked by the Federal Reserve Act in the reserve situation in this country it is necessary to examine at some length the system heretofore prevailing. Under the National Bank Act these banks were divided into three groups or classes, referred to as the country banks, the reserve city banks and the central reserve city banks.

There are three central reserve cities: New York, Chicago, and St. Louis. Every national bank in these cities is a central reserve city bank. The reserve cities are forty-seven in number and include the larger cities of the country. Every bank not situated in any one of the three central reserve cities or the forty-seven reserve cities is a country bank. This last term includes all the national banks of the smaller cities in the country, of the manufacturing towns and communities of New England and the Middle States and thousands of national institutions doing business in the agricultural sections.

The Country Banks.—The country banks, by the terms of the National Bank Act, are required to keep a cash reserve at all times equal to fifteen per cent of their deposits. Under the old law the country bank must keep only forty per cent of this required reserve in its own vaults, while it is allowed to deposit sixty per cent of the required reserve on call in such national banks in any of the reserve cities or central reserve cities as may be approved as "reserve agents" for it by the Comptroller of the Currency. Thus it follows that if a country bank has \$1,000,000 of deposits it must keep a reserve equal to at least \$150,000, of which \$60,000 must be in its own vaults and \$90,000 may, if the bank so desires, be kept on deposit with the national bank or banks, which have been approved as its reserve agents, located in either a reserve city or a central reserve city. It should be noted that the bank is not required to keep any portion of its cash reserve on deposit with reserve city or central reserve city banks; it may all be kept in its vaults, if the bank so elects. It is very probable, however, that

there is not a single national bank in the country which follows the practice of keeping its entire reserve in its own vaults. The reasons for this will be developed a little later.

The Reserve and Central Reserve Cities.—The second class of national banks, known as reserve city banks, includes all national banks located in forty-seven cities of the country, which from time to time have been designated as reserve cities. Every national bank in them is required to keep a reserve at all times equal to at least twenty-five per cent of its deposits. It must be borne in mind that the deposits of a reserve city bank include not only what the banker refers to as individual deposits—the deposits of individuals, firms, partnerships and corporations—but also deposits which have been made with the reserve city bank by country banks, for which it is the reserve agent.

A reserve city bank is permitted by the National Bank Act to keep one-half of its required reserve on deposit, subject to withdrawal on demand, in a national bank or banks in a central reserve city, approved by the Comptroller of the Currency, as its reserve agent. Thus, under the law a reserve city bank with \$1,000,000 of deposits must keep a reserve of at least \$250,000, of which \$125,000 must be in its own vaults, while the balance of \$125,000, or so much of it as the bank desires, may be on deposit with a central reserve city bank.

Every national bank within the central reserve cities must keep a reserve equal in amount to at least twenty-five per cent of its deposits, including not only individual deposits but deposits by bankers for whom it acts as reserve agent.

The Reasons for the System.—This rather complicated system of reserves was authorized by Congress because it was necessary to allow the banks of the country districts or smaller cities to keep reserves in other banks in the larger centers of trade in order to facilitate the commercial exchanges of the country; and also because it was necessary to have some means by which banks of the larger cities could finance payments for their customers in the great centers

of the country, especially in New York, Chicago and St. Louis. For these reasons it was felt to be perfectly proper to permit the carrying of a part of the reserves of country banks and of the reserve city banks in the vaults of other institutions. Such a practice has brought a certain degree of mobilization of cash reserves, which it was anticipated would be of advantage to the country.

Its Weaknesses.—Our system of deposited reserves has failed miserably in times of stress, although it has worked reasonably well in ordinary times. It is contended that it has, to a large degree, built up the great centers, and more especially New York City, at the expense of country districts. It has been responsible for the seasonal withdrawal of money which was at one time a most serious embarrassment to business, especially in New York, Chicago and other large cities in the fall months, but which has practically disappeared in New York City since the panic of 1907. However, the fact that this system persisted for half a century without any successful attempt being made to alter it indicates that, while the defects may have been serious, they were not sufficiently grave to bring about any change. It was not until the system of deposited reserves brought about the panic of 1907 that the country at large became convinced that this feature of the national banking system was vicious, dangerous and likely to produce trouble at any time. With this conviction began the movement which finally ended in the enactment of the Federal Reserve Act.

Much of Our Reserve Fictitious.—As a matter of fact, the actual available reserves of the three classes of national banks in the country are much less than is indicated by the percentage specified in the Act quoted above. According to the report of the Comptroller of the Currency as of October 21, 1913, the country banks held in round numbers \$294,000,000 of cash in their vaults and had on deposit in the reserve city and central reserve city banks \$534,000,000. The reserve city banks held \$251,000,000 of cash and had on deposit with the central reserve city banks \$258,000,000.

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At the same date the central reserve city banks held in cash \$381,000,000. The central reserve city banks on the same date owed other national banks \$540,000,000 and had on deposit from State banks, trust companies and savings banks over \$424,000,000—in all a total of bankers' deposits exceeding \$964,000,000, as compared with \$993,000,000 of individual deposits held. Now it is obvious that these national banks of the central reserve cities could not by any possibility return to the reserve city and country banks, for whom they acted as reserve agents, the portion of their reserve deposited with them. They owed these institutions almost \$1,000,000,000, while the cash which they possessed aggregated only \$381,000,000. Similarly the reserve city banks on the same date owed national banks, State banks, trust companies and savings banks over \$918,000,000 against which they held cash to the amount of \$251,000,000, and could theoretically, although never actually, receive at any time upon call \$258,000,000, which they had on deposit with national banks in the central reserve cities. This condition is referred to frequently as the pyramiding of reserves, which means, in substance, that the national banks of this country, omitting from consideration the State banks where the same condition exists in an even more aggravated form, are doing business largely upon a paper reserve, which experience has shown is utterly useless in times of panic. The seven thousand five hundred and nine national banks held cash and paper reserves on October 21, 1913, as follows:

	Cash in vaults.	Due from banks.
Country banks	\$294,000,000	\$534,000,000
Reserve city banks	251,000,000	258,000,000
Central reserve city banks	381,000,000	.....
	<hr/> \$926,000,000	<hr/> \$792,000,000

As a matter of fact the national banks of the country held \$926,000,000 in cash as against total deposits subject to reserve requirements of \$7,172,000,000 or about 12.8 per cent of the liabilities subject to the requirements.

Dangers of the System.—So conclusive are the lessons

to be learned from the experience of the last half century with the system of redeposited reserves, that there is a practical unanimity among bankers and financial experts that the reserves of our banks, with the exception of the money actually held in the vaults, are, in the words of William Ingle, Vice-President of the Merchants and Mechanics National Bank of Baltimore, "A great deal of a delusion and a snare." In every panic, the country banks and the reserve city banks have found that it has been impossible for them to secure the return of the portion of these reserves which has been redeposited in New York, Chicago, and St. Louis. At a time of great stress, when the banks have been subjected to a drain, they have been suddenly bereft of the support which, in theory, should have been forthcoming from their reserve agents, and have been forced to depend upon the six per cent or twelve and a half per cent reserve, which was contained in their own vaults. What is even worse, the outbreak of a panic in New York City, where every panic of the last half decade has started, was the signal for the suspension of cash payments by every bank in the country, within a few hours. As soon as the demands for cash from the New York banks were met with a refusal, or as soon as it became apparent that the New York banks were about to be forced through the necessity of self-preservation to suspend payment, practically every bank the country over followed suit for its own self-protection. Thus a local panic, in many cases occurring when business conditions were exceedingly prosperous and healthy, has completely disorganized the exchanges of the country and brought business to a standstill.

The Changes Provided.—The greatest advantage of the regional system is that the country will no longer be dependent upon the tranquillity of the financial situation in a single large city of the nation. The disturbance of conditions in New York will affect chiefly the section comprised within the territory of the reserve bank of New York; and if the other reserve banks of the country have followed a conservative policy, it should exert little more

influence upon the territory of the other reserve banks than such disturbances in this country now affect England, Germany or France. If a rather clumsy simile may be permitted, we might compare our present system to a huge warehouse in which fire can sweep from one end to the other without check, but which is now to be divided into from eight to twelve sections by fire walls. A conflagration starting in any section can be confined largely to that section, and through the other sections of the warehouse aid may come to fight the fire which has thus been localized.

Past Difficulties Due to a Bad System.—In justification of the New York banks it should be made clear that their failure to return the cash of the country banks is not due to flagrant disregard of their obligations, but to the defects inherent in the situation, the evils of which they can not overcome. As Mr. Ingle stated, the reserves are "fictitious," in that instead of being a cash reserve, as would be indicated by the name, they are paper reserves. That is to say, they have been built up through the deposit of checks, drafts, and other negotiable paper, and as a matter of fact the New York banks have never had, and could not secure, without a complete disorganization of commerce, the cash equivalent of the redeposited reserves of the country banks with them.

Illustrations.—The exact situation is well illustrated by a portion of the testimony of Mr. George M. Reynolds, President of the Continental and Commercial National Bank of Chicago, the second largest national bank in the United States, in which he describes one of his experiences in the panic of 1907. Mr. Reynolds says: "At the time, one of my junior officers came to me and said, 'One of our customers is here and he is very boisterous and he is very excited, and he says that he wants to get out what he put into our bank.' I said, 'Well, there is no trouble about that.' He said, 'Well, this man is very much exercised and I think you had better see him.' So they showed the gentleman in. I said to him, 'What can I do for you?' He said, 'What is the matter with this bank? What is the reason that I can

not get out of this bank what I put into it?' I said, 'Why, there is no trouble about that. I am sure your idea must be entirely erroneous.' 'Well,' he said, 'this is the first intimation I have had of any encouragement at all along that line.' I said, 'Sit down and let us see what the trouble is.' I investigated the matter and found that his bank had \$67,000 on deposit with us, and then I said to him, 'Very well, we will give you back what you gave us.'

"I found that in the make-up of that \$67,000 there was \$13,000 of sundry items, payable all over the country, in his cash letter just received. Then I said, 'By way of doing what I said we will do, here is your letter and your \$13,000 of sundry items. Now we owe you \$54,000. Now we will prepare a bundle of checks indiscriminately, for that is the sort of checks you gave us, aggregating \$54,000, and we will give them back to you, and we then will have given you what you deposited with us.'"

"He said, 'I do not want that; I want the money.' I said, 'I beg your pardon; your statement was that you wanted what you put into this bank.' 'Well,' he said, 'what I want is the money.'"

"I said, 'What you want of us is to let you and your community accumulate these checks, no matter what they may be, and you want to send them to us, and, in time of emergency, you want me to be a magician and turn these checks into bank notes because every bank upon which we could hope to realize upon them in cash is absolutely closed through public fear and distrust of the bank.'"

Later on in his testimony Mr. Reynolds explains how even to the country bank itself its deposit in the reserve bank is, to a large degree, a fictitious reserve. He takes as an illustration the case of a merchant who goes to his bank and says, "'I want a \$10,000 Chicago draft.' The banker probably has \$10,000 or \$12,000 at Chicago, and it might be \$2,000 or \$3,000 more than the legal requirement would make it necessary for him to carry, but he would have to carry this additional \$2,000 or \$3,000 in order to give you

that check. He goes to a grain merchant that night and says, 'I have got to have some Chicago exchange and you are owing me some money and I am carrying that grain. I will have to realize against it. You must load up two or three cars of grain and send it into Chicago, and draw your draft against the commission merchant, attach the bill of lading, and make some exchange for me.' The moment he gives that draft, attached to that bill of lading, it is entered on his books, and in the meantime the cars of grain are started on their journey to Chicago, which may be one or two days distant from that point; and it is a reserve under the law the moment he enters it on his books."

The Effect of "Interchange of Credit."—In other words, if it were possible to make an instantaneous comparison of the books of the country bank and of its Chicago reserve agent, we would find that the country bank had credited to itself on its own books items which would raise its reserve several thousand dollars above the amount that would appear on the books of the Chicago bank. This condition is a continuous one, for the daily remittances which contain a miscellaneous collection of checks, drafts, etc., are credited on the books of the country bank to its own reserve account when they are put into the mail, whereas it will probably be several days before the reserve agent will grant this credit to the country bank upon its own books. The enormous volume of these items is shown by the following remark by Mr. Reynolds, "You will see it means a great deal when I tell you that the institution with which I am connected last year accepted and turned into cash or its equivalent, for immediate use over our counter, \$2,500,000,000 of what we call 'outside items,' represented by 19,000,000 different checks. You will, from that statement, get the idea a little better, perhaps, of what I mean by an interchange of credit."

In much the same way, the counter-current sent by the reserve centers to the country banks for collection tends to give a fictitious appearance, even from the standpoint of the book account itself, to the reserves of the country banks.

Mr. Ingle, in connection with his statement that the redeposited reserves are largely "a delusion and a snare," engaged in the following interesting colloquy with Senator Hitchcock:

Senator Hitchcock. Whenever an individual citizen of Baltimore draws a check on your bank which goes to New York and gets in the hands of your New York correspondent, does that New York correspondent charge that check to your account?

Mr. Ingle. If in connection with it or any one of the four New York correspondents we have, it does it that very minute.

Senator Hitchcock. What do you mean by any one of your New York correspondents?

Mr. Ingle. I have different arrangements, sir, with different banks.

Senator Hitchcock. You mean to say you have four New York correspondents——

Mr. Ingle (interposing). And they will charge that check on Baltimore, or any other check they choose to send up drawn on Baltimore, direct to our balance in their hands.

Senator Hitchcock. If John Smith, in Baltimore, draws a check on your bank, your correspondent charges that up to your account?

Mr. Ingle. Up to my account.

Senator Hitchcock. Without submitting it to you.

Mr. Ingle. I get it the next morning, and I am given a debit for it.

Senator Hitchcock. Let me ask, when is it charged to you?

Mr. Ingle. The very moment he gets it; the very moment he gets it he debits it.

Senator Hitchcock. I say is that the practice of country bank correspondents?

Mr. Ingle. I say I can only tell you from our experience. I say it is a growing and vicious practice, in my judgment.

Senator Hitchcock. Which is the vicious practice?

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Mr. Ingle. This thing of permitting the maintenance of those double accounts.

Senator Hitchcock. What do you mean by maintaining double accounts?

Mr. Ingle. I am speaking of that situation which you pictured, where we have a balance in New York, and where New York will send us business from day to day for collection and remittance either upon receipt, or after three days, or next week, if you choose. Now, what does this practice result in? We are assumed to keep twenty-five per cent reserve. Can't you see, if any bank has a balance to its credit in New York of \$500,000 it will also have \$500,000 cash in its vaults. The two sums together may represent the twenty-five per cent on that bank's deposits. Now, if that New York bank sends its out-of-town bank business from day to day, for remittance twice a week, let us assume the paying bank may accumulate from the New York bank \$250,000 worth of business to be remitted for twice a week. Now, in practice, what do many banks do? They continue to count as reserve the full debit balance of \$500,000. And, as we all know, a reserve is only maintained at all with a view of protecting depositors of a bank in case of failure or liquidation—if we never failed we would not want any reserve. You see that means our reserve the moment the bank fails; it is not our total debit balance in New York; it is that total debit balance less the balance we may have on our books from New York for remittance at any particular time in the future. So that instead of having \$500,000 reserve, we, as a matter of fact, only have \$250,000 reserve.

Senator Hitchcock. You mean New York has sent you \$250,000—

Mr. Ingle (interposing). For collection and remittance once a week, if you choose—an accumulating balance. The practice is, where it is done for accumulating balances, it sends a very small balance the first three or four days and a very large one on the fifth or sixth day to save the New York bank.

Senator Hitchcock. To save the New York bank?

Mr. Ingle. The New York bank gets its return quickly. For instance, one bank in Baltimore will arrange to remit for a certain New York bank on Wednesdays and Saturdays each week. That New York bank will arrange with another Baltimore bank to remit it twice weekly, on Tuesdays and Fridays, and so on, possibly with a third bank on Wednesdays—on the other two days. Now, in sending their deposits they so arrange it that their money will be away from them the shortest possible time, which is a very excellent idea from their point of view.

Senator Hitchcock. You mean New York does that?

Mr. Ingle. New York does; yes. The idea that I insist upon in opposition to this double account business is this: That a bank which keeps its reserve honestly, which tries to keep a reserve of twenty-five per cent—and if it does not it can not help itself, it is gone, in tight times or for some other reason—such a bank, in trying to keep its reserve, only figures as its reserve its actual balance in New York plus its cash on hand. Now, if those full debit balances are permitted to be counted, can't you see that the bank which does that and makes no deduction for offsetting balances has a very superior advantage over a bank which insists upon a single account, in which is always reflected the actual amount of money the owning bank can draw for in case it has to have it.

Senator Hitchcock. You say you have \$7,000,000 of country-bank deposits?

Mr. Ingle. Yes.

Senator Hitchcock. Suppose you receive a batch of checks against one of those country banks in a country town in your State; do you charge those checks to the account of that country bank when you receive them?

Mr. Ingle. I think so; in our case in seventy-five per cent of our accounts.

Senator Hitchcock. Does that depend altogether on the arrangement between the banks?

Mr. Ingle. Altogether on the arrangement between the banks, and sometimes they are changed.

Senator Hitchcock. Suppose you send that country bank collection items; when do you charge them with those items?

Mr. Ingle. Only upon receipt from that bank of advice of their payment. We charge them, as a matter of fact, one or two days after they have the money. * * *

Senator Hitchcock. You say with seventy-five per cent of your country bank customers you charge checks to them just the minute you receive them?

Mr. Ingle. I think I am approximately correct there, sir. I say it is substantially so in the case of 800 correspondents; I do not follow it personally, but I feel I know it."

From the examination of other bankers, it appears that the practice outlined by Mr. Ingle is not universal and that, in fact, a very large group of country bankers will not allow their New York reserve agents to charge checks against them when received, insisting that the checks be forwarded to them for collection and that they remit to the reserve agent after the checks have been examined and charged to the account of the customer drawing them. A remittance in payment of the collection is made, as a rule, by a draft drawn by the bank upon the correspondent which forwarded the checks; and this draft, when received, is charged against the account of the remitting bank upon the books of its reserve agent.

Results of Current Practices.—This situation, however, where it exists, still further emphasizes the fictitious character of the reserves, for, as a matter of fact, the reserve agent holds a large amount of items, consisting of checks and drafts deposited with it by its customers and for which it has given credit upon its books, entitling the customer to check against it at once. This amount creates a large proportion of the reserve which the country bank is carrying with the reserve agents, so that the net indebtedness of the reserve agent where this plan exists is really very little.

Country bankers are very free in declaring that their reserve accounts with reserve city and central reserve city banks are, to a large degree, nothing but checking ac-

counts which they would have to maintain in any event for the purpose of selling exchange.

Mr. A. F. Dawson, President of the First National Bank of Davenport, Iowa, in testifying before the Senate Committee, stated that, "The First National Bank of Davenport, Iowa, is required to keep its reserve in either Chicago, St. Louis, New York, or some other reserve city. Along with the question of reserves, there is the question of daily exchange. I asked the boys in the bank to figure up how active our New York and Chicago accounts were. Most of the financial relations of our portion of Iowa are in the direction of Chicago, rather than in the direction of St. Louis, although we have considerable business in that direction also. I found that our Chicago balance turned over every two days in the matter of exchange. In other words, we were writing a sufficient number of drafts on Chicago banks every two days to wipe out our balance there, and that balance was larger than the reserve which we were required by law to carry.

Senator Hitchcock. What methods do you accept to restore that balance? What proportion is in currency?

Mr. Dawson. There is no currency; they are items of credit.

Senator Hitchcock. No currency?

Mr. Dawson. No currency at all; we never ship currency to Chicago.

Our New York account shows the activity of the relations between the mid-West and the financial metropolis. Our New York account turns over once in every three days. We sell enough New York exchange every three days to wipe out the balances we carry in New York.

Senator Reed. You would have to have that much money there, whether you had a reserve or not?

Mr. Dawson. Very nearly so, unless there would be some change in the existing practices in the world of banking."

The Difference between Gross Deposits and Net Deposits.—This brings us to a rather technical but very important distinction which has grown up concerning the

differences between what bankers know as "gross deposits" and "net deposits." This was very ably explained by Mr. Frank A. Vanderlip, who testified that the "National Bank Act merely states that a reserve shall be kept upon the deposits. It does not state whether these are net or gross deposits. Gross deposits are the total deposits to the credit of the depositors in the bank. Net deposits are the deposits after certain deductions, among which are all items that are in the process of collection. For example, if a bank in New York has \$10,000,000 of deposits, and a bank in Pittsburgh deposits a check drawn on a Chicago bank for \$1,000,000, the gross deposits of the New York bank would be \$11,000,000, but in figuring the reserves we would deduct the \$1,000,000 check until it had been collected, and we would figure our reserve on \$10,000,000, which is the amount of the net deposits."

At the same time, however, the Pittsburgh bank has increased its reserve, through the deposit of the \$1,000,000 check, by that amount; although the New York bank is not keeping any reserve against its bankers' deposit represented by this check. The Federal Reserve Act, as passed by the House, did not state whether the reserves which the member banks should keep should be based upon the gross or net deposits. If the reserve were to be figured on the gross deposits and these Federal reserve banks were to undertake all the collections of the country, as it is hoped will be the case, there would be a mass of deposits with them which would, in fact, consist only of items in process of collection but against which they would have to keep reserves. This mass of items in the process of collection would be so great in all probability that it would use up a large part of the reserve bank's available funds through the extra reserve which it must keep. Mr. Vanderlip, among other bankers, advocated that the reserve banks should be permitted to deduct items in process of collection, while at the same time the depositing bank would be forbidden to count uncollected items in its reserve, being required to credit such items to its reserve account only when collection had

been made. This suggestion was so sound that the following provision was incorporated in the bill:

"In estimating the reserves required by this Act, the net balance of amounts due to and from other banks shall be taken as the basis for ascertaining the deposits against which reserves shall be determined. Balances in reserve banks due to member banks shall, to the extent herein provided, be counted as reserves."

Paying Interest on Deposits.—Strong as is the case in support of the value of the reserve balances of the national banks with correspondents, yet the fact nevertheless remains that these, to a large degree, have been unnaturally forced through the payment of interest by the reserve agents to their correspondents upon these balances. In fact, a large proportion of these bankers' balances have been built up through the practice of paying interest averaging about two per cent per annum upon such balances. While this rate of return is very small, yet it is potent for the reason that the country bank must keep this reserve under the law. If in its own vaults it is absolutely idle and brings in no return, while if deposited with the reserve agent it will bring in two per cent, besides giving the bank great advantages in handling its exchange business.

The practice of paying interest upon deposits has become so universal among the reserve agents that little comment is aroused at the present time. When it was in process of development it met with great opposition. It is important in this connection to set down the following excerpt from the report of the committee appointed by the New York Clearing House Association to consider and report what reforms were required in the operations of banks with each other and with the public, to increase the security of their business, following the panic of 1873. The Committee pointed out that deposits derived from "strictly commercial operations" can not fluctuate so widely from time to time as to produce disturbance in the community, but "that on the contrary deposits which are purchased by the payment of interest or otherwise and which must, therefore, of neces-

sity be largely loaned 'on demand,' are the cause of continual agitation and solicitude to those who hold them in charge. They are certain to be withdrawn at the season of the year and at the moment most inconvenient to the banks and to their dealers. * * * These deposits were to a large extent loaned upon stocks and bonds in Wall Street, payable 'on call,' with the confident belief that they were there earning more than the interest paid for securing them, and were available as promised. But, from the very nature of the case, the rapid withdrawal of deposits from the banks made the 'call' from every direction simultaneous and closed every resource from which the 'street' derived its power to respond. Borrowers upon stocks were deprived both of their facilities of borrowing and of all power to sell their securities. The necessary result occurred. Banks which found themselves in this dilemma had no alternative but to ask the assistance of their associates, and the conflagration was so rapid and violent that every consideration of fraternal sympathy, self-preservation and public safety compelled a general and earnest coöperation; and the majority who had for long years conducted their business upon sound principles and who had patiently submitted to the loss of valuable accounts, drawn from them by their associates, by practices against which they had continually protested, instantly responded to the call by placing their resources at the command of those who had done so much toward producing the calamity; making common cause, the weak with the strong, to avert a universal catastrophe."

Evil Effects of the Practice.—Bankers, who by experience are associated with this problem, almost without exception recognize the danger pointed out by the Clearing House Committee. The following colloquy between Mr. Reynolds, the president of the largest bank in Chicago, and Senator Nelson is in point:

"*Senator Nelson.* If you abolish the payment of interest on bankers' deposits I would be quite willing, speaking for

myself, to leave this question of reserves to the banks, to their own judgment.

Mr. Reynolds. You have taken the words out of my mouth."

Again further on the same banker, whose institution has very large bankers' deposits, was asked the question whether if the law prohibited banks of reserve cities and of central reserve cities from accepting deposits of any reserve bank it would result in keeping the money at home. He replied: "Well, I think it would to some extent, but that money would be invested at home. Then the question of whether it would be invested in liquid assets and whether it could be readily gotten out when needed is a question that would have to be considered. Of course the exchange requirements would make it necessary to carry balances in large centers." He was of the opinion that the amount of reserves to be kept should be left to the judgment of the member banks.

The Federal Reserve Act provides that after we have gone through several preliminary stages, an entirely new system of reserves shall be created. It strikes down the present practice of the carrying of reserves by one class of national banks with another, and substitutes in its place a system by which, instead of the concentration of a large part of the reserves in one or two points, as New York or Chicago, the funds of the member banks are to be kept in the region in which they are situated. In brief, the reserves are to be held either in the vaults of the member bank itself or on deposit with the Federal reserve bank of which it is a member. Instead of all the banks of the country being knitted together, at least theoretically, into one system, the banks in each region are to centralize their reserves with their regional bank. At the same time important changes were made in the proportion which the reserve shall bear to the deposits of a bank.

CHAPTER XXI

THE REDEPOSITING OF RESERVES UNDER THE NEW ACT

What Factors Determine a Bank's Reserve?—What elements determine the proper cash reserve for a bank? There is no golden rule or fixed percentage; and strictly speaking, the reserves which two banks located within a few feet of each other should properly carry may differ widely. The test is not the size of the bank or necessarily the region in which it is situated. It is the character of deposits which it possesses, that is to say, the character of people who are depositors and the general character of the business in which they are engaged. Going even further, the question involves the function which the deposits play in the business activities of the depositors. Thus, for example, the same man may have two accounts, one a checking account from which he pays his ordinary expenses, and the other a savings account, which he touches only in an emergency, such as sickness.

It is really impossible to specify by law, with scientific accuracy, the reserves which each bank should keep. The question must, to a large degree, be solved by each institution for itself, and a few moments of investigation by any one will disclose the difference in reserves which are kept by the various banks in his own neighborhood. Generally speaking, the main factors to be considered are: first, the character of the people making up the depositors; second, the character of these deposits—that is, whether they are commercial savings deposits or trust deposits, etc.; third, the convertibility of the assets in which the funds of depositors have been invested; and finally, the ability to convert these assets upon short notice into cash.

Better Form of Bank Statement.—The stereotyped form of bank statement in this country is in many respects unfortunate, for it does not convey any information as to

the real degree of convertibility of the assets of the reporting bank. It would be much better were our banks required to list separately the commercial paper maturing within fifteen days, within sixteen to thirty days, within thirty-one to sixty days, within sixty-one to ninety days, and after ninety days, as is done by some European institutions and by a few of the American banks. Such a bank statement would be somewhat in the form of the following statement, published regularly by one of the oldest banks in Philadelphia:

PENN NATIONAL BANK

Comptroller's Call, Jan. 13th, 1914

ASSETS

Immediately Available:

Cash and Reserve	\$1,675,079.78
Checks for Clearings	165,209.71
Due from Correspondents	585,866.63
Demand Loans	1,118,484.18

\$3,544,640.30

Available within 30 days:

Loans due in 30 days	1,401,153.50
United States Bonds	200,000.00
Other Bonds and Investments	615,364.00

\$5,761,157.80

Other Loans and Discounts:

Due within 4 months	2,363,682.88
Due after 4 months	399,308.29
Banking Property	257,130.32

\$8,781,279.29

LIABILITIES

Deposits	\$6,523,109.83
Circulation	186,600.00
Capital Stock	500,000.00
Surplus and Profits	1,571,569.46

\$8,781,279.29

Liquid Assets and the Reserve.—The greater the proportion of short-term paper which the bank carries, the smaller is the amount of reserve which it must keep. A bank with a large proportion of its assets maturing and being redeemed in cash every few days is much stronger than

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another institution carrying a larger cash reserve, but holding assets of long maturity.

By the provisions of the Federal Reserve Act, the reserves of national banks will be materially reduced. This reduction is prompted by the changes which the Act will work in the position of the member banks by increasing their safety and security, and hence causing them to rely less upon themselves than heretofore. In the beginning, the creation of a rediscount market will be of great assistance to the banks, enabling them in times of stress to convert their commercial paper into cash. By rediscounting the bank will be able to increase its cash reserve through the larger balances which it will create with the Federal reserve bank. These balances can be turned into money by the member bank drawing upon the regional bank, having it ship either gold, legal tender, its own or Federal reserve notes. Instead of each bank relying upon the sufficiency of its own reserve, together with the part which it can theoretically call from its reserve agents, it will be necessary to keep only such an amount of money as will meet its needs until the machinery of rediscounting can be put into operation.

Proportion of Reserves Actually Available.—Moreover, as we have seen, a large part of the present reserve is of little or no value, and in so far as serviceability in times of stress is concerned, should be eliminated from any calculations of the money with which the bank could hope to meet unusual claims of depositors. The law, therefore, in reducing the reserves is not really reducing the margin of safety. If the reserve banks are conservatively managed,—if they follow the intent of the law that they shall not seek large profits, if they keep a larger portion of cash than the reserve city and central reserve cities have done, if they wisely use the power to issue notes at the same time meeting the reasonable demands of their member banks, and if they coöperate fully with the Federal Reserve Board in rendering assistance to each other, the proportion of the rediscounted reserve, instead of being a snare, should now become available to a bank when needed. The country bank,

whose reserve will eventually be reduced from fifteen to twelve per cent, will have a real twelve per cent reserve as against the present six per cent reserve which it has in its own vaults, and upon which alone in times of stress it has been able to count. In the same way the reserve city bank, whose reserve will be reduced from twenty-five to fifteen per cent, will be in a stronger position, because the twenty-five per cent has often consisted in reality only of the twelve and one-half per cent of cash in the bank's own vaults. No class of banks will be more benefited than the central reserve city banks, whose reserves, while reduced from twenty-five to eighteen per cent, have nevertheless been decreased more than those of any other class of banks. The central reserve city banks, instead of having roughly two dollars of bankers' demand liability for each dollar of cash which they hold, will now be relieved entirely of these highly combustible, dangerous deposits, and will have their entire cash available for the protection of their individual depositors.

Reserves on Time Deposits.—One of the most important changes which has been made in the reserve requirements of national banks and such State banks as may become members, relates to savings and time deposits. The Act specifies that "demand deposits within the meaning of this Act shall comprise all deposits payable within thirty days, and time deposits shall comprise all deposits payable after thirty days and all savings accounts and certificates of deposit which are subject to not less than thirty days' notice before payment." It is impossible to state accurately the volume of time deposits as defined by the Act. A savings business conducted on the lines of savings fund societies organized under State charter is not specifically authorized by the National Bank Act, and while it has been tolerated by the Comptroller of the Currency, it has nevertheless been extra-legal. The national banks have been forced by the provisions and interpretation of the National Bank Act to pay savings deposits upon demand, when the demand has been insistent. The result has been that many national

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banks which have accepted savings accounts have not listed them as savings deposits, but have included them in their statements under the item "individual deposits subject to check." In the majority of cases national banks have adopted the practice of giving to savings depositors time certificates of deposit, which are, in substance, an acknowledgment of indebtedness on the part of the bank, with an agreement to repay the customer, upon surrender of the certificate, the amount stated thereon after the expiration of a certain number of days. In support of this conclusion, the following remark of Senator Nelson, in the hearings before the Senate Committee on Banking and Currency, may be of value: "I might say from my observation in the West that while the national banks have, in substance, done what you call a savings-bank business, they have done it in the form, not of bank books, but of time certificates of deposit. They issue time certificates of deposit drawing interest payable in six or nine months of a year, with the condition that if money is drawn out before the specified time, they lose the interest. That is the way most of the little country national banks that I have observed have been carrying on a savings-deposit business, but the funds have been mixed with the other funds of the bank and utilized in the same way."

Relative Amount of Time Deposits.—It is dangerous to endeavor, from the figures of the Comptroller of the Currency, to place any estimate upon the amount of time deposits as defined in the Act. However, the following figures are set down for what they are worth; in all likelihood they understate rather than overstate the amount of time deposits:

	Savings deposits reported.	Time certificates of deposit.	Total.
Country banks.....	\$741,304,232.76	\$463,386,351.24	\$1,204,690,574.00
Reserve city banks.....	90,259,036.13	55,630,378.76	145,889,314.89
Central reserve city banks..	1,166,827.58	14,382,478.18	15,549,305.76
Total.....	\$832,730,096.47	\$534,399,108.18	\$1,367,129,194.65

The remarkable disparity in the relative amounts of time deposits held by the three classes of banks is one of the most interesting features of the present banking situation. The central reserve city banks, heretofore at the head of the banking system, held less than \$16,000,000 of time deposits, the reserve city banks held approximately \$147,000,000, while the country banks held the staggering total of over \$1,200,000,000. Roughly, one-third of the deposits of country banks are made up of time deposits, while the proportion of deposits of central reserve banks of this character is insignificant. The explanation of the large amount of time deposits held by the country banks is to be found in the conditions under which they do business. In the agricultural districts the savings banks are not nearly as numerous, nor do they have as strong a hold upon a community, as in the manufacturing towns of New England or in the large cities.

Character of National Banks' Savings Deposits.—A very considerable proportion of the savings accounts in the towns and smaller cities are not of the conventional order, but are an outgrowth of the commercial banking business of the institutions. Customers open savings accounts for their wives and children, or perhaps open a special savings account in which to deposit surplus funds, utilizing for the purpose their ordinary checking accounts, when this surplus will not be needed for some months. In other words, the savings business is an allied business; and under such circumstances the customer is very willing to take a time certificate of deposit, particularly when by so doing he can secure higher interest than he could if he insisted upon keeping his funds in such a manner that he could check against them at any time.

Looked at from a banking stand-point, there is no reason why as large a reserve should be held against these savings accounts as against checking accounts. This is true whether they consist of money in an ordinary savings department, or of time certificates of deposit. Savings accounts are much more stable, and experience has shown that the with-

drawals are exceedingly regular. The result is that the bank can not only keep with safety a much lower reserve, but the balance can be invested in assets of a sort not as quickly convertible into cash as would be demanded by the necessities of the ordinary checking business.

Reduction of Reserves on Time Deposits.—The reduction of the cash reserve against such of the business of the national bank as represents deposits not withdrawable within thirty days, from the old requirement of from fifteen to twenty-five per cent to the new basis of five per cent, will make a vast difference in the amount which our national banks must keep on hand, and in the amount they may deposit with reserve agents.

If we take the country banks as an illustration, we find that they were required heretofore to carry against their \$1,204,000,000 of savings deposits, a reserve of \$180,600,000, partly in their own vaults, and partly on deposit with their reserve agents. Under the new law, the reserve required upon the savings business will be reduced to \$60,200,000. Whether the country banks will see fit to take advantage of the reduction permitted by the new law, must be considered fully when we have finished our inquiry relative to the conditions underlying reserves.

In readjusting the reserve requirements of the national banks, Congress was faced with a difficult problem. It was generally admitted that, with a more perfect system, lower reserves could be safely established; but how much lower the reserves should be, to what degree they should consist of cash in the bank's vaults, and the amount by which the deposit with the reserve agents should be reduced, was a matter upon which nothing but opinions could be secured. One would suppose that foreign experience would be of some value, but, unfortunately, little help could be secured from that source. Abroad the reserves which the banks carry can be very much smaller than would be required in this country, because of the difference in the character of the business which they conduct. The practice of borrowing on commercial paper for the purpose of discounting bills, or of financ-

ing the purchase and sale of commodities, is comparatively rare. The greater proportion of trade is financed by drafts, with a life of from seven to fifteen days. This furnishes a tremendous volume of short-time paper, certain to be liquidated upon maturity, and of the very choicest character for rediscounting at the central institution. Under these conditions, the joint stock banks in London, which correspond roughly to our member banks, have found it sufficient to carry a reserve averaging about three and one-half per cent; while in Germany such institutions have run along for considerable periods with cash reserves in their own vaults averaging about one per cent. It is true that considerable agitation has arisen in England and Germany to require joint stock banks to keep larger reserves, on the ground that too great a strain is placed on the Bank of England and on the Reichsbank, respectively, and that the persistent following of this course will bring the banks to financial disaster. It is evident, however, that the conditions are so dissimilar abroad that it would not be safe for us to copy their practice.

Abolition of Deposited Reserves.—The almost unanimous view of the bankers, who appeared before the Congressional Committee, or who expressed themselves concerning currency reform, was that an indispensable feature of the plan must be the removal of a considerable part of the deposited reserves from the national banks to the new regional banks. When this point was passed, a wide difference of opinion developed. The divergence in the views of bankers concerns two main problems: first, the number of centers into which the mobilization of bank reserves should be effected, and second, the proportion of the reserves of the banks which should be mobilized. The first question, relating to the degree of concentration of the reserves to be turned over to the Federal banks, is intimately related to the problem of whether it would be better to have a central institution with branches, such as proposed in the Aldrich plan; a few large institutions, say three or four in number, such as was proposed by the majority of the bankers of New York and other large cities; or whether it would be more desirable

to have eight or twelve districts, in which the reserves should be mobilized.

Regional System and the Reserve Problem.—From many points of view, the problem of the number of reserve banks is the problem of the concentration of reserves. We have already reviewed the advantages and disadvantages of the three systems suggested above, and have seen the applicability of each system to American conditions. It is, of course, obvious to any one that the mobilization of all of the reserves into one vault, belonging to a central bank, would be highly inexpedient. It would be of no advantage to a bank in San Francisco, which suddenly needed help, to be able to call upon the concentrated reserves of the country contained in a vault in New York or Washington. The six days of time which would be required to ship the currency across the country would probably measure the ruin of the needy institution. As a matter of fact, no banker has proposed the actual physical concentration of reserves into one center. Even the strongest advocates of the central bank have taken the position that there should be a number of points, for the sake of illustration say fifteen in number, as under the Aldrich plan, at which the reserves of the country should be mobilized. The chief argument in support of the central bank as a possible solution of the reserve problem is that the reserve in each of these fifteen stations is under the control of the central bank or reserve association, which has absolute power over its distribution and can ship money from one point to another as needed. So with fifteen stations, it would be possible, should a panic develop in three of them, to draw funds from the remaining twelve for the assistance of those in trouble. The control of the central bank over its branches would be absolute. There would be no red tape, no necessity of consulting local interests, and no delay, such as would be involved in calling meetings of directors of regional banks and submitting plans for the transfer of part of their funds to some other reserve bank.

These arguments are very strong and have compelled great respect. Looked at from another stand-point, however,

we must recognize the fact that against these advantages are the drawbacks which have already been outlined as incident to the central bank plan. Moreover, it is doubtful whether the advantages are as great as might appear at first glance. With a central institution the temptation would be to draw the reserves away from some of the districts and concentrate them in others, and this movement would be prompted perhaps not so much by a desire to strengthen the banking situation of the country as a whole, as to take advantage of the greater opportunities for profit which might be found at other points.

Central Bank and the Reserve Problem.—In brief, it has been very strongly urged that the creation of a central bank would mean the continuation of existing conditions, by which the reserves of the country have drifted into one or two points, particularly into New York City. The experience of the past would seem to indicate that such a tendency is vicious.

We need not, at this point, completely review the arguments for and against the central bank. The question as to whether or not each of the regional banks to be established by the new law can stand by itself is also one which we have already considered. But since the larger proportion of the assets of the regional banks consists of the reserve deposits with them of the member banks, this problem necessarily presents itself again in the consideration of the question of the reserve of the member bank. Suffice it to say in conclusion, that, in the long run, in a time of panic the amount of aid that either a central bank or a number of regional banks can give is a matter of proportion; for the degree of aid will be measured by the proportion of the deposits which have been placed by each bank with the central institution or with the regional bank. If every bank should need help, which is an inconceivable thing, the system is bound to fail. The more we can localize our difficulties, the better it will be for the country, provided the region in distress can secure prompt and efficient aid from those districts not suffering a similar misfortune. Whether or not the regional

banks will help each other in times of stress is a matter which can be determined only by experience. The problem is one largely dependent upon the personal equation: Will the directors of the several regional banks recognize, as the directors of the central banks in Europe have done, that the best policy is to stamp out a panic wherever it appears by every bank going to the aid of the one in distress; or will they take a narrow, insular view of their obligations and refuse to help, on the ground that to do so would imperil their constituent banks? We must remember that the Federal Reserve Board possesses wide powers in this direction, and that if it is composed of able, alert men it can do much to check such a narrow, short-sighted policy, should it arise, and may actually prevent its ever arising.

The Proposal for Three Regional Reserve Centers.—Many bankers have advocated a system comprising three regional banks, basing their arguments entirely upon the matter of reserves and the collection of checks and other cash items. These gentlemen argue, with considerable force, that violently to uproot our present system, by which the funds of the country are carried largely in New York, Chicago or St. Louis, will work serious disturbance. Unless there are strong reasons to make such a step necessary, the plan for a greater number of regional banks is ill-advised. It is their contention that if we should create a regional bank in each of the three central reserve cities to which the reserve cities could turn for rediscounts in times of stress, or if we should expand the functions of the clearing houses, giving them the right to rediscount and issue notes against these rediscounts, we would solve the problem with which the nation is confronted. It would, in either event, be unnecessary to effect any radical readjustment of the cash reserves; to disturb the present relations of the country and reserve city banks with each other and with the central reserve institutions; to disarrange the methods of collection and of handling the exchange business of the country, which is the result of years of development; or to make any other

violent change whatsoever which might disturb business and create financial trouble.

Moreover, a powerful argument in support of this view is that such a regional institution would be very much larger, and hence more powerful, than the eight or twelve established under the Reserve Act, and, therefore, its ability to help in times of stress would be very much greater. This contention, however, in order to be valid, must take for granted that the larger community will not have the same relative demands from its constituent banks, that the pressure will come almost entirely from the central reserve cities, and that, therefore, commanding a wider territory for each central reserve city, the reserve bank will be in a much stronger position to help the beleaguered spot.

Concerning the second general point of difference, which is whether or not it is advisable to take the entire reserves out of the present reserve centers, an equally wide divergence of opinion was developed. In order to understand the discussion, it should be emphasized at this point that the provisions of the Federal Reserve Act, in general, require the transfer from their present reserve agents to the Federal reserve banks by graduated stages, over a space of three years, of the entire reserves not held in the vaults of the member banks. That is to say each member bank is compelled to keep its required reserve in one of two places, either in its own vaults or in the vaults of its Federal reserve bank. The law does not prohibit the bank from keeping deposits with other banks, but simply specifies that such deposits, if kept, shall not be counted as part of the reserve of the depositing bank.

It was not to be expected that the reserve and central reserve city banks would give up without a struggle their country deposits,—which roughly aggregate, one city with another, one-half of their totals. It has required years of effort and millions of dollars of outlay to build up these deposits. The bankers and many of the business men of the reserve centers have argued that this money would largely be idle if moved to other points; that it was being used to

finance the commerce of the nation in its present location; that it was following the regular channels of trade; that upon it the commercial and financial welfare of the cities depends; and that they had developed business upon the faith of these funds, the withdrawal of which would be grossly unfair, and inimical to the best interests of the nation.

What Proportion of Present Reserve Balances Should Be Withdrawn.—Practically speaking, no one proposed that the present deposits with reserve agents should be kept intact. It was conceded by all that the reserve banks should carry a part of the reserve of the member institutions. The question which remained for settlement was how the reserve not carried in the member banks' vaults should be divided between the reserve banks and the present reserve agents. From the first draft the Federal Reserve Act has provided that the entire reserves, other than the portions kept in the member banks' vaults, should be carried in the vaults of the Federal reserve banks. The efforts of the bankers have been to secure a modification of this provision, and have been entirely unsuccessful.

Proposals of Country Banks concerning Reserves.—Generally speaking, the modification which they desired was to split the portion of the reserve not carried in the banks' vaults, between the present reserve agents and the Federal reserve banks, according to the proportion which appealed to each particular banker. Mr. A. J. Frame, for example, advocated that a sum equal to five per cent of the deposits of the member banks,—that is to say, from one-third to one-fifth of the total reserves of the national banks,—should be transferred from the present reserve agent to the Federal reserve banks. The so-called "country banks" at the convention of the American Bankers' Association at Boston, held while the bill was pending before Congress, adopted a series of resolutions in which it was declared, "that whatever percentage of reserves is agreed upon, should carry with it the right to keep not less than one-third of such reserve with approved reserve agents and fiscal centers."

The reasons advanced in support of these arguments

were: (1) that the new Act would not relieve the member banks from the necessity of carrying balances with their reserve agents, these balances being necessary to enable the country banks to sell exchange and handle their collections. It was pointed out that at the present time many bankers found it necessary to keep balances with institutions so situated, and that, under the law, these balances could not be counted as a part of their reserve. (2) That such a great concentration was unnecessary and inadvisable; and that even though it were advisable, an absolute requirement in the statute might work great hardship, because conditions might so change as to precipitate a panic before the enforced shifting occurred. It would be better to start with a small per cent, and then, if necessary, to shift a larger proportion later on. The last of these two arguments is, in substance, the same as that already discussed in examining the question as to whether any portion of the banks' reserve should be left with the reserve agent. The only point which needs extended consideration is the first: Should a bank be required to keep balances with its present reserve agent, irrespective of the provisions of the Reserve Act, in order to handle its exchange and collection business?

It is difficult to express any intelligent opinion upon this point. The only reason why a bank should keep such balances is for the handling of collections and for the incidental work of selling exchange to its customers. The degree to which this necessity will continue depends directly upon the success with which the regional banks meet in developing their clearing functions. One of the important services which the framers of the Act expect the Federal reserve banks to perform, is to do what the clearing house does for its members. According to the law, member banks may deposit checks, drafts and bills of exchange with the Federal reserve bank, thus putting upon it the work of collecting these items. Member banks may also draw drafts upon the Federal reserve bank, which drafts, it is expected, will have as great currency as do the present drafts drawn by banks upon their New York or other reserve depositories. It is

necessary, however, to defer extended consideration of the question of the clearing functions of reserve banks until a later chapter.

Objections to Fixing Absolute Limits in Readjusting Reserves.—The objection to the requirement of the Reserve Act fixing absolute dates by which time transfer of the reserves from the present reserve agents to the Federal reserve banks must be effected, loses some of its force when it is remembered that the law specifies that the transfer must be made within a certain period, and not on any given date. It is, of course, evident that if a large amount of money were suddenly to be shifted from the present reserve agents to Federal reserve banks at a time of great financial stringency, the operation would be attended with a great deal of peril to the country. However, business is not largely extended, and the banks have had ample warning of the impending change and, to a large degree, have prepared themselves for it by a cautious lending policy. How great this strain will be under the best conditions and how severe it might be under adverse conditions we can consider intelligently only after we have examined in detail the amount of money which must be shifted and the changes which the shift will bring.

The Question of a Fixed Minimum Reserve.—Some question might be raised as to the wisdom of the policy expressed by the Act in requiring a fixed minimum reserve. This is a continuation of the policy which has prevailed during the last fifty years and which has been tried in practically every State. Abroad, the institution of a reserve fixed absolutely by law is comparatively unknown. The banks are left, to a large degree, to keep such reserve as in their judgment is necessary; and it is urged that such a plan is the only true principle of good banking and that the American practice is vicious. The question of reserves is, to a large degree, a psychological problem. One of the chief purposes of keeping a reserve is to keep public confidence, and the standards of public confidence are fixed largely by the conditions which have heretofore existed. The proposal

on the part of the banks that they be allowed to keep any reserve they might wish would call forth almost universal denunciation from the American public at large. We have become accustomed to a fixed reserve, and it would therefore have been a grave mistake to incorporate into the new Currency Act a provision which would bring popular distrust upon the new system. On the other hand, the fixed reserve does carry with it serious objections. If the reserve of a bank runs below its legal limit, the fact becomes known through a public statement or in a mysterious underground fashion which is one of the most inexplicable things in banking. The fact that the reserve has run below the legal limit turns suspicion into positive distrust, swells the abnormal withdrawals into a run, and, unless aid is promptly forthcoming, destroys the bank.

Even though we accept as correct the criticism that the American banker has persistently misinterpreted the law, construing it as a command to keep a certain definite reserve and no more, which has unfortunately been the case in the reserve and, more especially, in the central reserve cities, the fact remains that, from the stand-point of the ability of the bank to withstand a shock, the fixed reserve is a handicap. Under the new system this handicap is not likely to be as serious as it has proved in the past, for the member bank can withdraw from the Federal reserve bank any surplus above the legal minimum which it may have on deposit there, and if this proves insufficient, may discount its eligible paper. Thus, so long as the Federal reserve bank is able to meet the withdrawals of its members, there is no excuse for a bank which has been honestly and wisely managed having its reserve fall seriously below the legal minimum.

Conditions under Which Reserves Can Be Reduced below Minimum.—In order to make assurance doubly sure, however, the Federal Reserve Act meets the criticism concerning a fixed reserve by eliminating the extremely severe penalties which were provided by the National Bank Act for the violation of the reserve requirement, through the insertion of a clause which gives to the Federal Reserve

Board the right "to suspend for a period not exceeding thirty days, and from time to time to renew such suspension for periods not exceeding fifteen days, any reserve requirements specified in this Act: Provided, That it shall establish a graduated tax upon the amounts by which the reserve requirements of this Act may be permitted to fall below the level hereinafter specified."

The problem, if there is one, largely concerns the Federal reserve banks. These institutions, as we have seen, are required to keep reserves of gold or legal tender of not less than thirty-five per cent against their deposits; and reserves of gold of not less than forty per cent against Federal reserve notes in actual circulation and not offset by gold or legal money deposited with a Federal reserve agent. It is, of course, probable that in order to satisfy these regulations the Federal reserve bank will set off its gold to a large degree against its circulating notes. To the lending bank it makes little difference whether the demand for funds is met by shipments of gold or of legal tender; but inasmuch as it is altogether probable that a widespread movement of rediscounting would sooner or later force the Federal reserve bank to issue reserve notes, it will take great caution to make sure that it can command a sufficient amount of gold to enable it to meet the requirements of the law, even though it should take advantage, in extreme cases, of the provision permitting it to run down this reserve against its circulation by paying the required tax.

Inability to Use Federal Reserve Notes for Reserves.—

This problem is very similar to that which confronts the central banking institutions of every foreign nation, and the successful solution of the question depends to a large degree upon the character of the management of the Federal reserve banks. A feature of the Act which deserves consideration is the fact that the Act does not permit the member banks to count the Federal reserve notes as a part of their cash in figuring their reserve. In other words, these notes occupy the same position as do the national bank notes at the present time.

The problem concerning the Federal reserve notes, however, is somewhat different from that prevailing in the case of the national bank notes. As the business of the country expands, the amount of Federal reserve notes which will be issued will, in all probability, steadily increase, and the proportion of the legal tender money to the total amount of money in circulation will be correspondingly reduced. This tendency can be averted only by a consistent and brilliantly executed policy of expanding the gold reserve as the banking business of the country grows. If it should transpire that the proportion of legal tender and specie to the total amount of money in circulation should decrease, then it is inevitable that both the member banks and the Federal reserve banks will have greater difficulty in preserving their cash reserve. It is very possible that the situation might become so aggravated that the Federal reserve bank would be seriously embarrassed in getting its notes into circulation because of the fact that member banks would call for gold or legal tender, as they have the right to do, in return for the rediscounts or for the surplus reserve which they might then be carrying with the Federal reserve banks. This would, to a large degree, vitiate the whole plan; but, on the other hand, it would powerfully impress the reserve banks with the necessity of strengthening their position. This is desirable because it would insure a larger gold reserve for the country.

Will Interest Be Paid on Reserve Balances?—The question of the payment of interest upon the deposits of member banks with the Federal reserve banks is one which will likely be strongly impressed upon the attention of the Federal Reserve Board and the directors of the reserve banks shortly after their organization is completed. We have seen that, in the case of a large number of banks, the payment of interest upon reserve balances is a vicious practice because it forces the drawing down of the cash holdings of the bank itself by requiring it immediately to put this money at work in a manner which will earn the interest and the cost of handling it. This leads to an undue depletion of the reserve

institution, forcing it down toward the legal minimum, whereas it should be carrying a large reserve to meet any contingency which arises. It is contended that the payment of interest would, to a large degree, overturn the whole plan. It would reduce the reserve bank to the level of the commonplace bank, seeking to make profits for the member banks, its stockholders, through the payment of interest; and in this manner the plain intent of the law, which was to limit the profits which the member banks could draw from their investment in the reserve bank, would be evaded.

The payment of interest under certain circumstances, however, may conceivably be desirable. If it should transpire that the demands upon the Federal reserve banks are so heavy that their resources would be taxed to the limit, and if, at the same time, the member banks should keep their deposits down to the minimum, it might be wise for the reserve banks to strengthen their position by increasing deposits through this device.

If, on the other hand, it should appear that the Federal reserve banks will not have unusual demands made upon them, it will be most unfortunate if they adopt a policy of paying interest, for this will inevitably influence their directors in the management of these institutions. A factor which will be seriously considered by the State banks in determining whether to accept the Federal Reserve Act and subscribe to the stock of the regional banks will be this question of the payment of interest upon their reserve accounts. So long as it is possible for the State banks to deposit their funds with their depositories in the reserve and central reserve cities (these depositories being in all probability member banks under the Reserve Act), it will be difficult to convince them that by becoming members of the Federal reserve banks and carrying their funds on deposit with them they will gain more than the loss of the two per cent interest which they now receive. The only advantage which might offset this loss would be the better service which they could render their customers by means of the superior collection facilities through the Federal reserve banks, and the extent of this advantage is by no means clear at this time. The law

has endeavored to meet the objections of the State bankers in part by the following provision:

"If a State bank or trust company is required by the law of its State to keep its reserves either in its own vaults or with another State bank or trust company, such reserve deposits so kept in such State bank or trust company shall be construed, within the meaning of this section, as if they were reserve deposits in a national bank in a reserve or central reserve city for a period of three years after the Secretary shall have officially announced the establishment of a Federal reserve bank in the district in which such State bank or trust company is situate. Except as thus provided, no member bank shall keep on deposit with any nonmember bank a sum in excess of ten per centum of its own paid-up capital and surplus. No member bank shall act as the medium or agent of a nonmember bank in applying for or receiving discounts from a Federal reserve bank under the provisions of this Act except by permission of the Federal Reserve Board."

This clause is designed to put the State banks, during the transition stage, upon the same basis as the national institutions. It does not prevent them from carrying the same reserve with present reserve agents as may national banks doing the same business. To what degree this solves the objection of the State banks and how far they may go under the laws of the several States to meet the terms of this section of the Act, must be left for consideration in a later chapter.

Wisdom of Carrying Liberal Surplus Reserve.—As a general proposition, it is to be hoped that the Federal reserve banks and the Federal Reserve Board will use their influence and counsel to induce the member banks to carry a liberal cash reserve both in their own vaults and on deposit with their reserve agents, so that all of the strain of maintaining elasticity and of guarding against financial trouble may not be thrown upon the reserve institutions, and so that the member banks may keep themselves in position to handle the probable needs of their community without depending too much upon the reserve banks.

CHAPTER XXII

READJUSTMENT OF THE RESERVES IN THE COUNTRY BANKS

Country Banks largely Control Reserve Adjustments.—The key to the problem of the effect which the new reserve requirements and the readjustment of reserve deposits will have upon the banking system of the country is found to a large degree with the country banks. Over seventy-one hundred of the seventy-five hundred national banks are country banks, while the total resources of the country institutions comprise over one-half of the total resources of all of the national banks. Their strategic position at this time is unequaled by that of any other class of institution, in that they have the right to call upon the reserve city and central reserve city banks for over \$533,000,000. This puts them in a position where they can force the burden of adjustment, whatever it may be, upon the other institutions. The country banks are the only ones which are exclusively creditors in reserve transactions.

Large Reduction in Country Bank Reserves.—Moreover, the country banks will profit to a larger degree than any other class of institution by the reduction of their reserve requirements, owing to the fact that they possess by far the largest amount of time deposits. According to the report of the Comptroller of the Currency showing the condition of the national banks as of October 21, 1913, the country banks were carrying a 16.53 per cent reserve, of which 7.91 per cent consisted of cash in their own vaults and 8.62 per cent consisted of balances available with reserve agents. On that date the country banks were holding a trifle less than \$56,921,542 above the required legal reserve, while their excess in cash holdings over and above the legal minimum amounted to over \$71,000,000. The

country banks were in so strong a position partly because of caution which had been used for a number of months in extending loans, and partly because of the fact that they have always been more liberal in their reserve holdings than the other two classes of national banks.

A most perplexing question, which must be answered in order to make an analysis of the extent to which a shifting in cash will occur, is: What will be the policy of the country banks under the lower reserve requirements? Taking the condition of the last report as the basis for comparison, we find that the country banks will, under the new law, be permitted to reduce their required reserve from the present minimum of \$557,000,000 to a minimum of \$362,000,000—a reduction of \$195,000,000. From the testimony of the bankers before the Congressional committees, one would gain the impression that it is unlikely that the banks will take advantage to the fullest extent of the new reserve requirement permitting a reduction of cash in their own vaults from six per cent to five per cent. This remarkable unanimity of opinion is based in part upon the fact that at the present time banks do not take advantage of the six per cent minimum but carry one or two per cent above that amount. The excess is largely the result of painful experience in times of stress which has convinced country bankers that they must rely largely on their own resources, and not put too much confidence in their paper reserve. The banks which are located in towns and those which have heavy pay rolls can not as a rule carry as low as a six per cent vault reserve. In many cities it is necessary and quite universal to find banks carrying from ten to twelve per cent of cash in order to handle these and similar obligations. In order to secure the necessary amount of cash for such emergencies, these banks must frequently accumulate the money from other institutions several weeks in advance of the time for its use. The banks that have a surplus of cash sell it to an institution which has a use for it, rather than send it to a reserve agent in another city. They thereby

save express charges. The banks which purchase the cash will probably give to the seller a New York draft in payment. Although it is not safe to presume that the view of the bankers while the bill was in the progress of formation will represent the mature judgment of the banking fraternity, and that therefore a considerable reduction may occur in the cash reserve, yet the fact remains that the banks will not at once acquire implicit confidence in the Federal reserve banks. They will not rely largely upon the reserve banks until these institutions have demonstrated their ability to take care of their customers under all conditions. This may require many years. If foreign experience is any criterion, the tendency should be toward a small vault reserve with the main reliance upon the reserve carried with the Federal reserve banks.

Elimination of Redemption Fund from Reserves.—Considerable objection has been raised by the bankers to the elimination of the five per cent redemption fund as a part of the bank's reserve. The Federal Reserve Act provides that on and after its passage banks shall no longer be permitted, in calculating their reserves, to include the five per cent redemption fund as has heretofore been the case. This will eliminate, according to the latest information, something less than \$24,000,000 of cash from the amount which the country banks can count as a part of their cash reserve. However, in spite of the fact that the country banks as a class have been especially progressive as regards the issue of national bank notes, the elimination of the five per cent fund will rest less heavily upon them than upon the other classes of institutions, for the reason that the country banks have habitually kept a surplus cash reserve. The five per cent redemption fund amounts to a little less than two-thirds of one per cent upon the deposits subject to reserve requirements, and its elimination as a practical matter about offsets the reduction in the cash reserve from six to five per cent.

New Reserve Requirements for Country Banks.—

In the preceding chapter the effort made by the country bankers to have a provision inserted in the bill allowing them to keep one-third of their required reserve on deposit with their reserve agents was reviewed. The law, as it was enacted, did not grant this privilege and provides the following reserve requirement for the country banks:

"When the Secretary of the Treasury shall have officially announced, in such manner as he may elect, the establishment of a Federal reserve bank in any district, every subscribing member bank shall establish and maintain reserves as follows: (a) A bank not in a reserve or central reserve city as now or hereafter defined shall hold and maintain reserves equal to twelve per centum of the aggregate amount of its demand deposits and five per centum of its time deposits, as follows:

"In its vaults for a period of thirty-six months after said date five-twelfths thereof and permanently thereafter four-twelfths.

"In the Federal reserve bank of its district, for a period of twelve months after said date, two-twelfths, and for each succeeding six months an additional one-twelfth, until five-twelfths have been so deposited, which shall be the amount permanently required.

"For a period of thirty-six months after said date the balance of the reserves may be held in its own vaults, or in the Federal reserve bank, or in national banks in reserve or central reserve cities as now defined by law.

"After said thirty-six months' period said reserves, other than those hereinbefore required to be held in the vaults of the member banks and in the Federal reserve bank, shall be held in the vaults of the member bank or in the Federal reserve bank, or in both, at the option of the member bank."

Perhaps the following table may help to visualize the steps which will be taken and the final result which will be accomplished in the adjustment of the country bank reserves:

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REQUIREMENTS OF BANKS

Country banks should hold reserves:

1. Of twelve per cent on demand deposits.
2. Of five per cent on time deposits.
3. This reserve to be segregated as follows:

	12 mos.	18 mos.	24 mos.	30 mos.	36 mos.	There- after.
In vaults (compulsory).....	5/12	5/12	5/12	5/12	5/12	4/12
In Federal reserve bank (com- pulsory).....	2/12	3/12	4/12	5/12	5/12	5/12
For balance see appropriate foot- note.....	B	B	B	B	B	C

B. The remainder to be held for the first thirty-six months either in their vaults, in reserve banks or in national banks in reserve cities or central reserve cities.

C. Thereafter may be held in vaults or in reserve banks.

Country Banks can shift the Entire Burden.—It is possible for a country banker, if he should so desire, to shift his entire cash reserve at once from his present reserve agent to the Federal reserve bank. This is very unlikely to occur. In the first place the Federal reserve bank will probably make no attempt to encourage such a radical shift and doubtless will discourage it. The country banker, moreover, will find it will take some time for the Federal reserve banks to build up their collection machinery, and during the interval it will be necessary for him to depend upon his reserve agents for this work. Some of the bankers are of the opinion that the new reserve requirements will put a positive burden upon them, because they feel they can not reduce their present accounts with reserve agents without disorganizing their exchange and collection business. If this view is correct, the money to make payments to the Federal reserve banks must be secured from other sources. This is a very extreme view, and will probably not accord with the facts provided the Federal reserve banks collection operations are vigorously developed.

However, it is practically certain that for some time the country banks will be forced to carry considerable balances

with their present reserve agents, if they are to handle satisfactorily the business of their customers. This course of action is prompted by other important reasons. The country banker is, as a rule, a cautious man. He will not withdraw his New York and Chicago balances until he sees that the new law is going to work satisfactorily; for to do so would cut him off from all the assistance which he ordinarily receives from his reserve agent, the loss of which he will not voluntarily suffer.

Objections to Changing Reserve Arrangements.—The reserve agents are, as a class, reasonably liberal in their treatment of their correspondents. A country banker having a good balance and finding a sudden and unexpected demand for cash, can call the reserve agent on the long distance telephone and have the required amount of money forwarded on the next train. A banker in Johnstown, Pa., for example, can call his reserve agent in Pittsburgh at 10 A.M., and have the cash in his possession within two or three hours. Or he can call up Philadelphia and by the following morning have secured a part of his balance with his reserve agent. In other words, the reserve agents will ship money, if the amount demanded is on deposit, simply upon a telephone call, relying upon a confirming order to follow by mail. It must be borne in mind now that we are outlining the service rendered by the reserve agent in normal times when reserve accounts are really liquid and at the service of the country banks.

Some country bankers fear that the Federal reserve banks will not be as liberal and expeditious in their handling of such business. They contend that the promptness of reserve agents is the result of competition and the realization that if these hurry orders are not heeded the country bank will transfer its balance to some other institution. The Federal reserve bank, on the other hand, will have no such spur to prompt action. The Federal reserve bank may take the stand that it will not ship money until it has a written order authorizing its transfer. Such a course will require a country bank to keep a larger reserve in its own

vaults, and will to that amount decrease the extent of mobilization, which is one of the objects sought by the Act. These objections are predicated, of course, upon the assumption that the bankers who form a majority of the board of directors of the Federal reserve bank will take an unsympathetic attitude toward their constituents and will cease to be progressive business men. Moreover, the objection is to a considerable degree weakened when we remember that each Federal reserve bank is required and authorized to establish branches at various points in its district, to which member banks may go when they need money. The existence of these branches should reduce, to a considerable extent, the period of time required to secure a supply of cash.

Competition no longer May Assure Liberal Loans to Country Banks.—In line with this objection is another raised by the country banker to the requirements of the law which will compel him to borrow chiefly from the Federal reserve bank. We have seen that a large proportion of the country banks are borrowers, especially during the crop moving seasons. In arranging their loans they take advantage of the active competition existing between the various reserve city and central reserve city banks, and are assured of as liberal treatment as good business will warrant, because of the rivalry between these institutions for accounts. Should the entire deposit balances be transferred from the existing reserve agents to the Federal reserve banks, the reserve city and central reserve city banks will not feel under any obligations to loan money to the country banks after the balances are withdrawn; and the withdrawal of these balances will, to a large degree, remove the ability of the reserve agents to make such loans. When the country bank goes to a Federal reserve bank and applies for assistance, it is alleged that it will be at the mercy of one man's judgment and favor; that his estimate of the skill with which the bank is managed, of the value of the paper which it has discounted and of the wisdom of granting it liberal

loans, will, to a large degree, be final. In place of competition assuring fair treatment, the bank must rely upon its ability to keep in the favor of the Federal reserve agent, who will really run the bank. On the other hand, it is argued that the country banker may appeal to the board of directors of the Federal reserve bank to secure fair treatment, and that if he fails to get it there, he may appeal to the Federal Reserve Board. This is in part open to rebuttal.

As a matter of fact it is likely that cases of such alleged ill treatment will crop up from time to time; but if the Federal reserve agents are of a high type and if their work is supervised by a competent finance committee, and, finally, if the boards of directors of the reserve banks take an active interest in their institutions, it is not likely that any flagrant favoritism or arbitrary misuse of power will be frequently encountered. Again we are impressed with the fact that the success of the system in this respect, as in most others, depends upon personal supervision. If the right type of men be selected to manage the Federal reserve banks, there will be little cause for complaint from the constituent banks.

Another argument in support of the contention that no bank should be entirely divorced from its reserve agents, is that if they were allowed to keep a part of its reserve, as heretofore, the operations of borrowing and rediscounting would be greatly facilitated. The country bank could negotiate loans from its former reserve agent, turning over to it commercial paper or other collateral as security; and this reserve agent, whose quarters would in all probability be within a few squares of the Federal reserve bank or one of its branches, could personally attend to the necessary rediscounting, in order to reimburse itself for the funds which it had advanced to the country banks. Thus, instead of relying upon long distance correspondence to secure the desired rediscounts or of taking the time of an official of the country bank to journey to the city in which the Fed-

eral reserve bank or the nearest branch is located, the entire time and attention of the officials of the country bank would be devoted to the management of their institutions. This is advantageous when the need for cash arises, for such occasions are usually the ones in which the banker's presence is vital. As a matter of fact a method has been created which will overcome this objection. It is provided in Section 20 that "No member bank shall act as the medium or agent of a non-member bank in applying for or receiving discounts from a Federal reserve bank under the provisions of this Act, except by permission of the Federal Reserve Board." This provision inferentially gives to the Federal Reserve Board the power, when advisable, to authorize country banks to rediscount through reserve city or central reserve city institutions, under suitable regulations.

Degree of Rigidity of New Reserve Requirements.—One of the most important objections which can be raised to the reserve requirements provided for the country banks is the fact that the manner in which the reserves shall be kept is very rigid. After the transition stage has been passed, or subsequent to three years from the date of the establishment of the Federal reserve bank, the country bank will be required to keep four-twelfths of its minimum reserve in its own vaults, five-twelfths on deposit with the Federal reserve bank and the remaining three-twelfths either in its own vaults or with the Federal reserve bank, or both, as it may elect. As a matter of fact, only one-quarter of the cash reserve of a bank can be handled according to the discretion of the directors. It is probable that a bank will keep a larger reserve than the legal minimum. However, this will not insure it against a violation of reserve requirements, thereby subjecting itself to a tax or such other penalty as may be prescribed. A run may reduce the cash reserve which it has in its vaults below the specified four-twelfths; and while the surplus over and above the remaining nine-twelfths in the vaults of the Federal reserve bank may be large enough to offset the loss, and the aggregate

cash holdings in the bank's vaults and on deposit with the Federal reserve bank may exceed the minimum required reserve, nevertheless, according to the wording of the law, the bank will still be technically in default, because the cash in its own vaults does not equal four-twelfths of the minimum reserve which it is required to keep. The penalty, however, would doubtless be imposed only in extreme cases where the member bank refused or neglected to replenish its vault reserve by drawing upon the reserve bank against its balance therein. This operation is clearly covered in the following provision included in Section 19:

"The reserve carried by a member bank with a Federal reserve bank may, under the regulations and subject to such penalties as may be prescribed by the Federal Reserve Board, be checked against and withdrawn by such member bank for the purpose of meeting existing liabilities: *Provided, however,* That no bank shall at any time make new loans or shall pay any dividends unless and until the total reserve required by law is fully restored."

Probable Shifting of Reserve Balances.—It is impossible to tell with mathematical accuracy what will be the extent to which funds will be shifted from the present reserve centers to the Federal reserve banks in each district. In many ways this is the most serious problem which is involved in the establishment of the Federal Reserve system. Even though the system should work perfectly after it has been established, there will be ample ground for strong opposition, if it should appear that during the establishment of the system there is a serious dislocation of bank credits. The funds which are now on deposit with the reserve city and central reserve city banks represent an accumulation of fifty years, for which definite channels of employment have been developed. Upon this money depends to a large degree the business of our large cities. Apparently an important reorganization must occur. The money, which under the law must be paid to the Federal reserve banks, representing capital stock subscriptions and

the payment of the reserve which the member banks are required to keep with them as capital, must be withdrawn from its present employment. The enforced idleness of funds during the period of these withdrawals should be cut to the minimum and the shifting should be as gradual and as nearly automatic as possible. Even under the most favorable conditions, adroit and exceedingly skillful management by the Federal Reserve Board and by the various Federal reserve banks will be necessary. This will be even more true of the member banks, if this change is to be accomplished without embarrassing business. Unless there is some inherent defect in the plan which makes it unworkable, however, there is no reason to expect that the change can not be successfully managed.

As a banking problem it pales into significance when compared with the exploit of the French people in paying the German war indemnity amounting to \$1,000,000,000, a feat that was accomplished without in the least interfering with commercial business in France. The success of the French is to be attributed almost entirely to the perfect coöperation of all classes with the Bank of France, which successfully concluded this financial operation without a hitch or disturbance.

Readjustment Dependent upon Perfect Coöperation.—Too much emphasis can not be placed upon the fact that the success of the reorganization of our banking system depends upon the complete coöperation of our existing banks. It is possible for them, by pursuing a short-sighted policy, to bring disaster, and it is the duty of the leading bankers, of the board of directors of each Federal reserve bank, as well as of the Federal Reserve Board by precept and example, to secure unselfish coöperation on the part of all.

No question connected with the Federal Reserve Act is more anxiously inquired about than the extent to which funds must be transferred in the establishment of the system. Obviously the point of departure in the study of this

problem is the country banks. As we have seen, they are the creditor banks, and it is in their power to draw part or all of their contributions from the others. It is very difficult for us to make any estimate which will show accurately how great will be the withdrawals, or the necessity for them, on the part of the country banks. The following computations are presented, not with the idea that they reflect exactly what will occur, but simply to suggest how the reorganization of reserves will work, and as a general indication of the way in which the working out of the problem will depend upon the course of action chosen by the banks. The computations are intended not as prophecies, but as the means of discovering, if possible, the course of action which will accomplish the required end with the smallest possible disturbance to banking and to business conditions consistent with banking practice.

With these qualifications continually in mind the reader is invited to review the following computations showing the required readjustment of cash reserves of the country banks during the first twelve months, and again from the twenty-fifth to the thirtieth month. This second period represents the point of greatest strain upon our banking system, because the reserve payments by the country banks, the reserve city and central reserve city banks reach their maximum in that period.

COUNTRY BANKS (7186, omitting Hawaii and Alaska)

RESERVE REQUIREMENTS: 12 PER CENT OF DEMAND DEPOSITS AND 5 PER CENT OF TIME DEPOSITS

	12 mos.	18 mos.	24 mos.	30 mos.	36 mos.	There- after.
In vaults (compulsory).....	5/12	5/12	5/12	5/12	5/12	4/12
In Federal reserve bank (compulsory)	2/12	3/12	4/12	5/12	5/12	5/12

The remainder must be held for the first 36 months either in the vaults of the bank, in the Federal reserve banks, or in central or city reserve banks.

Thereafter it must be held in the vaults of Federal reserve banks or in the vaults of the member banks.

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	During the first year.	From the 25th to 30th month.
Net deposits subject to reserve (Oct. 31, 1913).	\$3,712,953,422.23	\$3,712,953,422.23
Time deposits.....	1,204,156,172.74	1,204,156,172.74
Demand deposits.....	\$2,508,797,249.59	\$2,508,797,249.59
12 per cent reserve on demand deposits.....	\$301,055,669.95	\$301,055,669.95
5 per cent reserve on time deposits.....	60,207,808.64	60,207,808.64
Total minimum reserve requirement. . .	\$361,263,478.59	\$361,263,478.59
Of above the bank must hold as a minimum in own vaults.....	\$150,526,449.33	\$150,526,449.33
And on deposit with Federal bank.....	60,210,579.73	150,526,449.33
The balance, on presumption of the smallest possible shifting of cash, would remain with reserve agents.....	150,526,449.33	60,210,579.73
	\$361,263,478.39	\$361,263,478.39
Present cash holdings.....	\$269,469,648.45	\$269,469,648.45
New minimum cash holdings.....	150,526,449.33	150,526,449.33
Excess available for Federal bank.....	\$118,943,199.12	\$118,943,199.12
Payments by country banks to Federal bank:		
Reserve with Federal bank.....	\$60,210,579.73	\$150,526,449.33
Subscription to stock.....	\$29,638,448.76	29,638,448.76
United States deposits.....	36,966,693.01	36,966,693.01
Total payment to Federal bank.....	\$126,815,721.50	\$217,131,591.10
Excess in cash in vaults available for Federal banks.....	118,943,199.12	118,943,199.12
Deficit.....	\$7,872,522.38	\$98,188,391.98

It would be possible to make a calculation in the same way, covering each of the six periods representing the various stages in the readjustment of reserves as set forth in the law. This, however, would simply be a repetition of the same method and may be easily worked out by any one who desires to examine the shifting in greater detail. Such a calculation would show the gradations by which the change would be accomplished, from the situation during the first twelve months, to the point of maximum strain from the twenty-fifth to the thirtieth month. In a later chapter the final strain upon the banking system, incident to the readjustment of reserves at the end of thirty-six months, is considered. At that time a proportion of the member banks' reserves can no longer be carried with present reserve

agents, but must be shifted to the banks' vaults or to the reserve banks. This phase of the reserve problem is not considered at all in the present computations. It is interesting to notice the difference in the new method of calculating the reserve over that which has heretofore prevailed. The calculation of the required reserve of a bank is an intricate matter, and is fully covered by the instructions issued by the Comptroller of the Currency. The only important change which the Federal Reserve Act makes in this calculation is (1) to omit the five per cent redemption fund as a part of the bank's reserve, and (2) to require the separate totaling of demand deposits, and of time deposits payable upon notice of at least thirty days.

Method of Calculating the New Reserves.—The above calculation really begins with the item "net deposits," which is the same thing in both cases, the presumption being that the calculation, as at the beginning of the twenty-fifth month from the establishment of the system, is based upon the figures of to-day. By "net deposits" is meant the gross or actual deposits of the bank less certain items against which the bank does not have to keep a reserve. The calculation to determine net deposits is an intricate one, and need not be reproduced in this connection. One of the most important items which is deducted from the gross deposits, by way of illustration, is United States deposits, against which, under the Vreeland-Aldrich Act, no reserve need be kept. After the net deposits have been ascertained, it will be necessary, from this time on, for the bank to separate them into two classes, (1) demand deposits, and (2) time deposits. When this has been done, the next step will be to calculate the required reserve against each; that is to say, the twelve per cent reserve required on demand deposits and the five per cent reserve required on time deposits. The sum of these two reserves represents the total minimum reserve requirement. No distinction is made between the component parts of this total minimum reserve in determining what proportion of it shall be (a) in the

banks' vaults, (b) on deposit with its Federal reserve bank, or (c) on deposit with present reserve agents.

During the first twelve months, five-twelfths of the total minimum reserve must be kept in the vaults of the country banks; at least two-twelfths must be kept on deposit with the Federal reserve bank; while the remaining five-twelfths may be kept either in the vaults of the country banks, on deposit with the Federal reserve banks or on deposit with the present reserve agents in whole or in part, as the country banks may elect. It has been assumed that the country banks will keep as much of this optional portion as possible on deposit with their present reserve agents, both because these balances will to a considerable degree be necessary in the formative stage of the new system to facilitate the selling of exchange and collections, and because the country banks will no doubt very properly extend every consideration to their present reserve agents in assisting their adjustment to the new conditions. If the country banks should take a totally unsympathetic attitude toward the reserve city and central reserve city banks, and if the reserve city banks should assume the same position toward the central reserve city banks, it can be stated that the system is doomed to failure. However, there is no business motive or reason to suppose that the country banks and the reserve city banks will adopt any short-sighted policy.

Payments Required of Country Banks within the First Three Years.—Upon the inauguration of the new system, the country banks will be required to deposit with the Federal reserve banks \$60,210,579.73, representing two-twelfths of their required reserve on their deposits, as stated in the latest report of the Comptroller of the Currency as of October 21, 1913. These payments will gradually increase with each succeeding period of readjustment until at the end of the twenty-fifth month they will have reached their maximum, the total payments up to that time aggregating, upon the basis of the deposits of the country banks at the present time, \$150,526,449.33. Along with this gradual and steady increase of the deposits with the

Federal reserve banks there will be a corresponding decrease in the optional balances carried in their own vaults, with the Federal reserve banks, or on deposit with the present reserve agents. The latter item will entirely disappear from the reserve calculation at the end of the thirty-six-month period. It will be noticed that the total reserve does not increase, and, as a matter of fact, is the same at the beginning as it is at the end.

Another interesting point brought out by the above calculations is that the minimum amount of cash which the banks can keep is very much less than the amount which they now hold and that the amount of cash which the country banks must hold does not increase as the period progresses, but remains stationary until the end of the thirty-sixth month, at which time a reduction from five-twelfths to four-twelfths of the total reserve is permitted. Thus it follows that from the inauguration of the system until the end of the thirty-sixth month the country banks will have over \$118,000,000 cash on hand that will be available to make payments and finance the reorganization of the banking system. The total payments which the country banks must make to the Federal reserve banks aggregate, during the first twelve months, \$126,815,721.50, while at the beginning of the twenty-fifth month the payments will have aggregated \$217,131,591.10. The preceding calculations are based upon the presumption that the country banks will use all of their available cash over and above the required minimum reserve in making the payment to the Federal reserve banks. In other words, they will call upon their reserve agents for as little money as possible, keeping their present deposit balances intact so far as they can do so.

How the Secretary of the Treasury Can Assist the Readjustment.—Upon the additional assumption that the Secretary of the Treasury will transfer from the present national bank depositaries to the reserve banks the entire United States deposits, we find that during the first year the country banks would have to withdraw only \$7,872,522.38 from their reserve agents. It is evident that these

withdrawals would be followed by others as the succeeding steps in the reorganization plan are taken, so that by the time the first very severe strain is encountered, at the beginning of the twenty-fifth month, the country banks would have been compelled to withdraw a total of \$98,188,391.98. The objection will at once be raised that this assumption is not likely to be realized. However, the purpose of making it is to show the minimum extent of the load which the reserve agents must bear in financing the requirements of the country banks. It will also be argued with much force that the withdrawal of the entire United States deposits is unlikely. If the Secretary of the Treasury should conclude to leave even one-quarter of the present United States deposits with the country banks, it would not be necessary, upon the basis of the above assumption, to call for any of their deposits with their reserve agents during the first year.

The Secretary of the Treasury has absolute discretion, under the terms of the Federal Reserve Act, in handling the government's balances. He may keep them in whole or in part on deposit with member banks of the Federal reserve system; he may deposit them in whole or in part with the Federal reserve banks; or he may keep any or all of them in the Treasury. As a matter of fact, he has announced that he will use the great power of his office to the limit in aiding the banks to adjust themselves to the new system, and in view of the fact that he has \$150,000,000 or \$200,000,000 in the Treasury which he can deposit in the Federal reserve banks, it might well be assumed, in the above calculation, that the United States deposits could be ignored, on the ground that they would remain with the country banks. However, the government deposits are an element in the problem. To be on the safe side we have presumed throughout the following computation that the Secretary of the Treasury will withdraw them, not because it is certain that he will take this step, but because it is intended to show, even with adverse action on his part, the extent of the strain upon the member banks.

Options open to Country Banks in Shifting Reserves.—In view of the gloomy prophecies that have been made concerning the enormous amount of money which will be withdrawn by the country banks, the results of the above calculations are rather startling. The explanation of the small reduction of the reserve balances which will be necessary is to be found in the revision made in the reserve requirement by the Senate, by which the banks are authorized to keep a five per cent reserve instead of a fifteen per cent reserve, as heretofore, upon their time deposits. We have seen from our review of the testimony of the country bankers before the Congressional committees, that it is unlikely that the country banks, as a whole, will run their reserve down to the minimum specified in the law. If the course indicated by the above calculation be pursued, the cash holdings of the country banks, as against their net deposits, would be reduced from the present level of 7.91 per cent to the minimum of 4.05 per cent permitted by the new law. It is very improbable that the cash holdings will be reduced to this minimum for years, if ever; and if they are reduced it will probably not be until the reserve banks have built up their organization for handling the clearing of checks and drafts and until the greater proportion of the State banks have been attracted to the system. This will extend the sway of the reserve banks over practically every important institution in the country, and enable them to clear checks no matter upon what bank they may be drawn. Most important of all, it is very unlikely that the country banks will cut their cash reserves in half until they have had one or more impressive demonstrations of the efficacy of the system in time of stress, and until time has erased the painful recollections of the folly of relying upon the deposited reserve.

The question which confronts us, therefore, in our calculation—which again it must be remarked is purely suggestive and intended to be nothing more than an analysis of the rather imperfect information at hand—is what will probably be the withdrawals of the country banks from

their reserve agents? On the one hand, they may withdraw the entire amount from the reserve agents. If they should do so, they would not only be within their legal rights, but they would still not have reduced their deposited reserve below the legal minimum. In order to keep a fifteen per cent reserve the country banks, with their present cash holdings, must have balances with reserve agents aggregating \$287,473,364.90. Their balances actually were \$533,253,765.18. With the total requirement for payments aggregating only \$217,131,591.10, it is evident that the country banks need have no fear of being required to make sacrifices or curtail accommodations to their local customers.

What Proportion of the Present Reserve Balances Will Remain?—It is, however, unlikely, as has already been developed, that the country banks will withdraw all of their balances with their reserve agents because of the necessity of preserving their present channels of collections and selling exchange. Our problem, therefore, narrows down to this: First, the country banks can in all probability finance the shifting of reserves required in the first year from the surplus cash in their own vaults released by the new requirements, if they so desire. It is unlikely that they will do this. Second, the country banks may raise the entire amount of their payments for capital, transferring United States deposits and reserves by withdrawals of a part of their deposits with reserve agents. This is entirely feasible, unless it will deprive them of their exchange and collection privileges. The withdrawals from reserve agents of the amounts needed for the payments ought not to cause any loss of exchange privileges, since the country banks have an excess of \$406,438,043. This should preserve the major portion of their present exchange privileges. We must remember also that the reserve banks should speedily offer excellent exchange and collection facilities to their customers. Third, as a more or less arbitrary conclusion, but one which will probably more nearly accord with the facts, we may assume that the country banks will adopt a middle course, withdrawing one-half of their payments from

RESERVES IN COUNTRY BANKS

COUNTRY BANKS (excluding Alaska and Hawaii)

	During the first 12 months.		From 26th to 30th month.	
	Taking all from reserve agents to make up payment.	Taking half from reserve agents and half from own vaults.	Taking all from reserve agents to make up payment.	Taking half from reserve agents and half from own vaults.
Present balances with reserve agents.....	\$533,253,765.18	\$533,253,765.18	\$533,253,765.18	\$533,253,765.18
Payments to Federal bank withdrawn from reserve agents.....	126,815,721.50	63,407,860.75	217,131,591.10	108,565,795.55
Excess balances with reserve agents for business needs.....	\$406,438,043.68	\$469,845,904.43	\$316,122,174.08	\$424,687,069.63
Amount withdrawn from reserve city banks.....	\$63,407,860.75	\$31,703,930.37	\$108,565,795.55	\$54,282,897.77
Amount withdrawn from central reserve banks.....	63,407,860.75	31,703,930.38	108,565,795.55	54,282,897.78
Amount withdrawn from own vaults.....	.....	\$63,407,860.75	.....	\$108,565,795.55
Total payments.....	\$126,815,721.50	\$126,815,721.50	\$217,131,591.10	\$217,131,591.10

their vaults and the other one-half from their reserve agents, dividing this withdrawal equally between the reserve cities and the central reserve cities. Upon the basis of the second and third assumptions let us calculate the effect of the Reserve Act upon the country banks at the end of the first year.

Upon the basis of the assumption that we have made to illustrate the problem of shifting the cash reserves as it affects the country banks, we find, to summarize, that the maximum withdrawals, up until the thirteenth month, under the worst conditions that can be anticipated for the country banks will be something under \$127,000,000, as contrasted with reserve balances of these institutions of upwards of \$533,000,000. Therefore, country banks' balances which would remain with the reserve agents, if they so elect, would in no case be less than \$406,000,000; while under the most favorable conditions, and upon the presumption that the country banks will run their cash holdings down to the lowest point, using this money as far as it will go to finance their requirements, the amount remaining on deposit with their reserve agents at the end of the thirtieth month may be \$435,065,373.20. The withdrawals which country banks will make from the present reserve agents will aggregate somewhere between \$98,188,391.98 and \$217,131,591.10. This is upon the presumption that the country banks will not entirely withdraw their balances, but will allow such portion thereof to remain as is not absolutely needed in financing payments to the Federal reserve banks.

It seems probable that the most accurate assumption is that in which the country banks will partly reduce their cash, making, at a rough estimate, one-half of the payments to the Federal reserve banks out of the surplus cash holdings and withdrawing the balance from their reserve agents. In this event the withdrawal of the country banks would be something over \$108,000,000. Under this assumption the balance which the country banks would leave with the reserve agents would exceed \$424,000,000. Even under the

most unfavorable assumption which we have made the balances would exceed \$316,000,000. In other words, the many statements that have been made that the new plan will immediately take the country money from the reserve centers, are fallacious. In so far as the requirements of the law are concerned, the country banks, if they should so elect, will be permitted to keep throughout the three-year period of adjustment, in which the new exchange and collection facilities should certainly have had time to develop, at least \$300,000,000 on deposit with the existing reserve agents; which would be ample, in all probability, to preserve their present channels of selling exchange and handling collections, and render them independent as regards the success of the Federal reserve plan of collection.

Will it Pay the Country Banks to Retain a Part of their Present Reserve Balances?—Of course when the final stage in the readjustment of the reserves of the country banks is reached, at the end of the thirty-six-month period, this surplus balance will be very considerably reduced. How much will remain after the final step in the adjustment is completed we must leave for discussion in a later chapter. It is important to remember, however, that during the first three years there will probably remain in the reserve cities and central reserve cities some \$300,000,000 of "country money."

CHAPTER XXIII

READJUSTMENT OF RESERVES IN THE RESERVE CITIES

Position of Reserve Cities.—Next to the country banks the reserve city banks are in the strongest position to meet the problems which must be solved in the readjustment of reserves under the Federal Reserve Act. The reserve city banks, according to the latest report made by the Comptroller of the Currency, counted among their resources "due from approved reserve agents," \$257,833,661.11; "due from national banks (not reserve agents)," \$226,569,970.46; and due from "State banks and bankers, trust companies, etc.," \$102,058,079.75, making a total of \$586,461,711.32. At the same time they counted among their liabilities "due to national banks (not reserve agents)," \$430,443,763.77; "due to State banks and bankers," \$225,543,075.93; "due to trust companies and savings banks," \$226,732,449.31; and "due to approved reserve agents," \$35,905,417.90, making a total of \$918,624,706.91. It will be seen that the reserve city banks, in spite of their large balances on deposit with central reserve city institutions, still owed more to bankers than they had the right to receive, the net debit balance against them being \$332,162,995.59, against which their holdings of legals and specie aggregated \$242,316,766.39. Upon this basis it would seem that the reserve city banks would have to depend almost entirely upon central reserve city institutions to supply the funds which would be necessary to enable them to meet the requirements of the Federal Reserve Act. Such a method of comparison, however, is not the correct way in which to judge this problem, and it is inserted here simply for the purpose of pointing out a fallacy into which the reader could readily fall.

The balances which the reserve city banks are carrying with national banks (not reserve agents) are at the present time necessary, being kept to enable them to handle their

exchange and collection business. A bank in Los Angeles, which is a reserve city, may carry a balance with a bank in Philadelphia, also a reserve city. It is impossible for the Los Angeles bank to count the Philadelphia balance as a part of its reserve; but the carrying of such a balance is warranted because it enables the Los Angeles bank quickly and cheaply to handle Eastern collections and sell exchange.

Significance of Clearing and Collection Problem.—If the Federal reserve banks will offer facilities for collection and selling exchange as good or better than those now existing, these balances will be released, since the motive for keeping them will have disappeared. To what extent the Federal reserve banks will be able to bring about this result is a matter which is discussed in the chapter on "Clearing Checks and Drafts." At this point, however, it should be remarked, in order to clarify the discussion which follows, that it may take a considerable period of time—perhaps years—to build up these facilities; and that, therefore, to assume that the reserve city banks can at once withdraw these balances would be to ignore the mandates of good business practice and to render valueless the entire calculation.

The same general condition exists as regards the resources known as "due from State banks and bankers, trust companies, etc." A considerable proportion of these items, as well as the item "due from national banks (not reserve agents)," represents deposits which are kept for business reasons, while the balance of these items is checks drawn upon these institutions, which the reserve city bank has in the process of collection at the time the statement is furnished to the Comptroller. The deposits with approved reserve agents may be withdrawn so long as their withdrawal does not interfere with the collection or exchange business of the reserve city banks. Doubtless they will be reduced as much as necessary, to enable the reserve city banks to finance their payments to the Federal reserve banks.

Relation of State Banks to Reserve City Problem.—A similar analysis of the liabilities of the reserve city banks shows much the same results. The item "due to national banks (not reserve agents)" is to be explained in part by balances which other national banks are carrying with these reserve city institutions for collection and exchange purposes, and in part by the sums which the reserve city banks owe to other national banks, not reserve agents, for items which are in the process of collection. The deposits represented by the item "due to trust companies and savings banks" will in no way be affected by the Federal Reserve Act, unless the State banks and trust companies, which are carrying these balances, should go into the Federal Reserve system.

In the calculations for the reserve cities and central reserve cities, it should be remarked that no account has been taken of any withdrawals from these cities resulting from the State banks joining the Federal Reserve system. The problem has been confined entirely to the national banks, largely because the statistics relating to State banks are so incomplete that any accurate opinion of the effect that they will have upon the system is impossible. Moreover, the extent to which the State banks will enter during the first thirty months is so problematical that any assumptions would be valueless. If the great majority of State banks should join promptly, the load which their action will throw upon the reserve city and central reserve city banks will be very much larger than if the new system is confined at the outset almost entirely to the national banks.

As a general conclusion it may be safely said that, in all probability, practically all of the national banks will enter the system, while a comparatively small proportion of the State banks will subscribe to the stock of the Federal reserve banks and accept the provisions of the Act. If a large proportion of the State institutions stay out of the Federal reserve system, it is unlikely that they will withdraw their balances from their present reserve agents, that is to say,

from the reserve city and central reserve city banks. This liability will to a large degree be allowed to continue.

Not all Reserve Cities Will Be Alike Affected.—Looked at from another point of view, the problem of the shifting of the reserves of the reserve city banks is not so serious as would be indicated by the preceding general comparison. It is practically certain that the three central reserve cities will be selected for the establishment of Federal reserve banks; and it is equally certain that the remaining reserve banks—five in number, if eight are established, and nine in number if the maximum of twelve are established—will be located in the reserve cities. In other words, from five to nine of the forty-seven reserve cities will be the homes of the Federal reserve banks, and the fortunate cities will probably be numbered among the larger of the forty-seven. It is true that this does not help any individual bank, for its payments will be just as large and the withdrawals of cash from it just as great, whether the Federal reserve bank is located across the street or whether it is a thousand miles away; but in so far as the district is concerned and the business men of these cities are involved, we must remember that this money will not be withdrawn from the majority of these cities, but simply transferred from one class of institutions to another. The new Federal reserve banks will be willing and prepared to lend this money out to the member banks—perhaps to the same ones and in the same proportion in which it was contributed—upon the production of satisfactory commercial paper for rediscount. These considerations are reassuring in case we should find that the reserve city institutions would be hard pressed to raise their contributions, and that their balances with their reserve agents were not sufficient, together with the cash which they have on hand, to enable them to meet the requirements of the Act.

New Reserve Requirements.—Under the provisions of the National Bank Act, the reserve city banks, as we remember, were required to keep a minimum reserve equal to twenty-five per cent of their deposits. By deposits are meant not only the individual deposits with the bank but

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bankers' deposits, representing such sums as are carried with reserve city institutions by country banks and other banking institutions. Of the twenty-five per cent reserve required by the reserve city banks, one-half must be kept in cash in the bank's own vaults while the other half may be deposited with approved reserve agents in central reserve cities. The reserve requirements for the reserve city banks are radically changed by the Federal Reserve Act. The provisions of the law governing this matter are as follows:

"A bank in a reserve city, as now or hereafter defined, shall hold and maintain reserves equal to fifteen per centum of the aggregate amount of its demand deposits and five per centum of its time deposits, as follows:

"In its vaults for a period of thirty-six months after said date six-fifteenths thereof, and permanently thereafter five-fifteenths.

"In the Federal reserve bank of its district for a period of twelve months after the date aforesaid at least three-fifteenths, and for each succeeding six months an additional one-fifteenth until six-fifteenths have been so deposited, which shall be the amount permanently required.

"For a period of thirty-six months after said date the balance of the reserves may be held in its own vaults, or in the Federal reserve bank, or in national banks in reserve or central reserve cities as now defined by law.

"After said thirty-six months' period all of said reserves, except those hereinbefore required to be held permanently in the vaults of the member bank and in the Federal reserve bank, shall be held in its vaults or in the Federal reserve bank, or in both, at the option of the member bank."

Perhaps the following summary of the provisions of the Act above quoted will help to fix it in the reader's memory:

Reserve city banks shall hold reserves:

1. Of 15 per cent on demand deposits.
2. Of 5 per cent on time deposits.

This reserve is to be segregated as follows:

	12 mos.	18 mos.	24 mos.	30 mos.	36 mos.	There- after.
In vaults (compulsory).....	6/15	6/15	6/15	6/15	6/15	5/15
In Federal reserve banks (compulsory).....	3/15	4/15	5/15	6/15	6/15	6/15
Balance of required reserve may be held as shown by appropriate footnote.....	A	A	A	A	A	B

A. The remainder to be held for the first 36 months in either the bank's vault, in the reserve banks or with reserve agents in reserve or central reserve cities as the bank may elect.

B. Thereafter it may be held in the bank's vaults or in the reserve banks but may not be deposited with present reserve agents.

Probable Results if Country Banks Withdraw the Minimum.—In dealing with the problem of the reserve city banks, we shall follow practically the same plan which we have pursued in investigating the effect of the law upon the country institutions. Our first inquiry is based upon the assumption which we made concerning the country banks,—that they will finance their payments to the Federal reserve banks so far as possible out of their surplus cash holdings, running them down to the legal minimum and drawing upon the central reserve institutions for as little as possible. We assume, moreover, throughout, that the withdrawals of the country banks, wherever necessary, are divided between the reserve city banks on the one hand and the central reserve city banks on the other, each class putting up an equal amount. The result of our investigation of the country banks shows that, under this assumption, the deficit which must be met by withdrawals from the reserve city and the central reserve city banks during the first year is the insignificant sum of \$7,872,522.38, which would be divided equally between the reserve city and central reserve city banks, making \$3,936,261.19 to be withdrawn from the reserve city institutions during the first year. At the point where the *required* cash payments to the reserve banks will reach their maximum strain at the beginning of the twenty-fifth month, the deficit which would have to be withdrawn from the reserve agents would be \$98,188,391.98, making the contribution of the reserve city banks \$49,094,195.99.

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RESERVE CITY BANKS (314).

RESERVE REQUIREMENTS: 15 PER CENT OF DEMAND DEPOSITS AND 5 PER CENT OF TIME DEPOSITS.

Assuming that one-half of the deficit of the country banks is withdrawn from the reserve city banks. Nothing withdrawn in first year (see previous chapter).

	12 mos.	18 mos.	24 mos.	30 mos.	36 mos.
In vaults (compulsory).....	6/15	6/15	6/15	6/15	6/15
In Federal reserve banks (compulsory)...	3/15	4/15	5/15	6/15	6/15

The remainder to be held for first thirty-six months either in the bank's vault, on deposit with reserve banks or on deposit with banks in central reserve cities.

	During the first year.	Up to the 25th to 30th month period.
Net deposits subject to reserve (Oct. 21, 1913).	\$1,915,160,396.96	*\$1,866,066,200.97
Made up of time deposits.....	146,889,314.89	146,889,314.89
And demand deposits.....	\$1,768,271,082.07	\$1,719,176,886.08
15 per cent reserve on demand deposits.....	\$265,240,662.31	\$257,876,532.91
5 per cent reserve on time deposits.....	7,344,465.74	7,344,465.74
Total minimum reserve required.....	\$272,585,128.05	\$265,220,998.65
Of the above the banks must keep 6/15 in their own vaults.....	\$109,034,051.22	\$106,088,399.46
On deposit with Federal reserve banks.....	54,517,025.61	106,088,399.46
The balance on the presumption of the small- est amount of shifting of cash would re- main with the present reserve agents....	109,034,051.22	53,044,199.73
	\$272,585,128.05	\$265,220,998.65
Lawful money in reserve city banks.....	\$242,316,766.39	\$242,316,766.39
New minimum cash holdings as above.....	109,034,051.22	106,088,399.46
Excess available.....	\$133,282,715.17	\$136,228,366.93
Payments of reserve city banks to Federal banks:		
Reserve (as above).....	\$54,517,025.61	\$106,088,399.46
Subscription to stock—3 per cent of their \$449,196,920 capital and surplus	13,475,907.60	13,475,907.60
Withdrawals of country banks.....	49,094,195.99	49,094,195.99
United States deposits.....	35,209,272.10	35,209,272.10
Total payment to Federal reserve banks...	\$103,202,305.31	\$203,867,775.15
Excess available (see above).....	133,282,715.17	136,228,366.93
Excess cash when country banks finance their own payments.....	\$30,080,509.86	†\$67,639,408.22

* Net deposits subject to reserve requirements on October 21, 1913, less one-half deficit of country banks withdrawn amounting to \$49,094,195.99.

† Deficit.

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	During the first year.		Up to 25th to 30th month.	
	Taking all from central reserve banks to make payments to Federal reserve banks.	Taking one-half from reserve agent and one-half from vaults.	Taking all from central reserve banks to make payments to Federal reserve banks.	Taking one-half from reserve agents and one-half from vaults.
Present balance with central reserve agents....	\$257,833,661.11	\$257,833,661.11	\$257,833,661.11	\$257,833,661.11
Payment to Federal reserve banks....	103,202,205.31	51,601,102.66	203,867,775.15	101,933,887.58
Excess balances with reserve agents....	\$154,631,455.80	\$206,232,558.45	\$53,965,885.96	\$155,899,773.53

The withdrawals by the country banks during the first year are small, and as they could easily be offset by United States deposits, we assume in the first part of our calculation that nothing is withdrawn from the reserve cities. The \$49,094,195.99 withdrawn by the country banks up to the beginning of the twenty-fifth month is taken care of by a deduction of this amount from the net deposits subject to reserve. Using this as the basis of the calculation, the effect upon the reserve city banks would be as is shown on the preceding page.

It is plain that the reserve city banks, at the very beginning, will have liberated through the lower reserve requirements practically as much cash as they will ever have at their disposal. If they use it, as we have presumed, to finance themselves during the first twelve months, it will simply postpone for one year the ultimate demands which must be made upon the central reserve city banks in succeeding periods. Thus, so far as the final result is concerned, it makes no difference whether the reserve city banks keep their cash, in the beginning, dropping before the twenty-fifth month down to the legal minimum; or whether they drop promptly to the new level and postpone their demands upon the central reserve banks. It would probably be better in the long run for the reserve city banks gradually to reduce their reserves. This would lead to a smaller disturbance of public confidence, and would be better banking, for a sudden

change is never desirable. It would be just as well to spread the demand upon the central reserve banks over as long a period as possible in order to allow them gradually to readjust their affairs. The amount which the reserve city banks must deposit with the Federal reserve banks upon the inauguration of the system is \$54,517,025.62; while at the point where the *required* cash payments to the reserve banks will reach their maximum stress, at the beginning of the twenty-fifth month, the deposits with the reserve banks will aggregate \$106,088,399.46. The portion of the balance which the reserve city banks are carrying with central reserve institutions, and which they can for thirty-six months include as part of their minimum reserve, is something over \$109,000,000 at the beginning, and falls to a little over \$53,000,000 by the twenty-fifth month.

The most important feature of our calculation concerns the ability of the banks to finance their payments on the basis of the assumption upon which the calculation is made, viz.: that the country banks will withdraw nothing so long as they can finance themselves; and that when the payments which they must make to the Federal reserve banks exceed their surplus cash, they will withdraw only the deficit, this being taken in equal proportions from the reserve city and the central city institutions.

We find that, during the first year, the reserve city banks would have an excess of cash over the payments which they must make and the minimum reserve which they are required to keep, of something over \$30,000,000; and that by the time the point of greatest stress as regards the *required* cash payments to the reserve banks, between the twenty-fifth and thirtieth months, has been reached, there would be a deficit of \$67,639,408.22. This deficit would have to be withdrawn from the central reserve city institutions.

Effect on Balances with Central Reserve City Banks.—

The last portion of the above calculation shows the effect which the various courses of action would have upon the balances of the reserve city banks with their reserve agents.

If they should take all of their payments during the first year from central reserve city banks, they would reduce their balances from a little less than \$258,000,000 to approximately \$155,000,000. If they would adopt the policy of taking half of their payments during the first year from their reserve agents and half from their own vaults, their balance would be reduced to approximately \$206,000,000.

If they should persist in the policy of forcing upon their reserve agents the burden of making all payments to the Federal reserve banks, their balances with their reserve agents will be reduced by the twenty-fifth month to about \$54,000,000. If throughout this period they should have followed the policy of furnishing one-half of these payments themselves and should call upon the reserve agents for the rest, their balances with reserve agents would be approximately \$156,000,000 at the expiration of that time.

Results if the Country Banks Withdraw One-half of Their Payments.—Let us next take up the assumption that the country banks will furnish from their own vaults one-half of the cash for the payments to the reserve banks themselves and call on the reserve agents for the balance, dividing this demand equally between the reserve city and the central reserve city banks. In this event the needs of the reserve city banks during the first twelve months and at the time of greatest stress, as regards the *required* cash payments to the reserve banks from the twenty-fifth to the thirtieth month, would be as is shown on the following page.

Upon the basis of these assumptions, we see that the reserve city banks during the first year would just be able, financing their operations as far as possible from their own vaults, to make their payments to the Federal reserve banks; while if they should continue this general policy up to the twenty-fifth month, they would have been compelled, up to that time, to have withdrawn approximately \$72,205,000 from the central reserve city banks.

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RESERVE CITY BANKS.

Assuming that country banks finance themselves for one-half of Federal reserve bank payments and call on reserve city banks and central reserve city banks (in equal amounts) for the balance.

	During the first year.		Up to 25th to 30th month period.	
Net deposits, 10/21/13.....	\$1,915,160,396.96		\$1,915,160,396.96	
Less withdrawal by country banks.....	31,703,930.38		54,282,897.77	
Net deposits subject to reserve.....	\$1,883,456,466.58		\$1,860,877,499.19	
Made up of time deposits.....	146,899,314.89		146,899,314.89	
And demand deposits.....	\$1,736,567,151.69		\$1,713,968,184.30	
15 per cent reserve on demand deposits.....	\$260,485,072.75		\$257,098,237.65	
5 per cent reserve on time deposits.....	7,244,465.74		7,244,465.74	
Total minimum reserve required.....	\$267,829,538.49		\$264,442,693.39	
Of above banks must keep in vaults.....	\$107,131,815.40		\$105,777,077.35	
And on deposit with Federal reserve banks.....	53,565,907.70		105,777,077.36	
Balance is assumed to be left with present reserve agents.....	107,131,815.39		52,888,538.68	
	\$267,829,538.49		\$264,442,693.39	
Lawful money holdings.....	\$242,316,766.39		\$242,316,766.39	
New minimum cash reserve requirements as above.....	107,131,815.40		105,777,077.35	
Excess available for Federal bank payments.....	\$135,184,950.99		\$136,539,689.04	
Payments to be made to Federal bank:				
Reserve (as above).....	\$53,565,907.70		\$105,777,077.36	
Subscription to stock.....	13,475,907.60		13,475,907.60	
United States deposits.....	35,209,272.10		35,209,272.10	
Payment account country deposits (as above).....	31,703,930.38		54,282,897.77	
Total payments to Federal reserve banks.....	\$133,955,017.78		\$208,745,154.83	
Excess cash available (as above).....	135,184,950.99		136,539,689.04	
Surplus cash in vaults.....	\$1,229,933.21		*\$72,305,465.79	

	During 1st year.		25th to 30th month.	
	Taking one-half from agents and one-half from vaults.	Taking all from agents to pay Federal banks.	Taking one-half from reserve agents, one-half from own vaults.	Taking all from agents to pay Federal banks.
Present balance with reserve agents....	\$257,833,661.11	\$257,833,661.11	\$257,833,661.11	\$257,833,661.11
Payments to reserve banks with drawn from reserve agents.....	66,977,508.89	133,955,017.78	104,372,577.42	208,745,154.83
Excess remaining with agents.....	\$190,856,152.22	\$123,878,643.33	\$153,461,083.69	\$49,088,506.28
Balance assumed to be left with reserve agents.....	107,131,815.39	107,131,815.39	52,888,538.68	52,888,538.68
Surplus balance with reserve agents....	\$83,724,336.83	\$16,746,827.94	\$100,572,545.01	
Overdraft of balances with reserve agents.....				\$3,800,032.40

* Deficit to be drawn from central reserve cities.

Possible Solutions of the Problem.—Presuming that the country banks draw on their reserve agents for only one-half of their payments to the Federal reserve banks, dividing the balance in equal proportions between the reserve city banks and the central reserve city banks, the amount of withdrawals which would be made by the reserve city banks from the central reserve city institutions would be as follows:

During the First Year:

(1) If the reserve city banks followed the example of the country banks, furnishing one-half of their payments from their own vaults and drawing upon the central reserve banks for the remainder, they would reduce their accounts with the central reserve city banks to approximately \$191,000,000, against which we have assumed that they will elect to keep \$107,000,000 on deposit with their present reserve agents as the balance of the reserve required under the new law. This would leave with their reserve agents slightly less than \$84,000,000 above the minimum requirements, which they could use as they see fit.

(2) If the reserve city banks should insist upon withdrawing their entire payments from the central reserve city institutions, they would reduce their balance from approximately \$258,000,000 to about \$124,000,000. Against this, we have assumed that they will keep a balance, representing the remainder of their required reserve of \$107,000,000 with their present reserve agents, leaving with their reserve agents a surplus above requirements which they have at their disposal of something less than \$17,000,000.

At the Period of Greatest Stress, as Regards the Required Cash Payments to the Reserve Banks:

(1) If the reserve city banks follow the policy we have assumed for the country banks, of furnishing one-half of the cash themselves and drawing the balance from their reserve agents, they will reduce their balances to approximately \$153,000,000, against which they will keep with their reserve agents the optional portion of their required reserve under the new law. At that time, this will amount to something

less than \$53,000,000. This would leave them a surplus balance with reserve agents of \$101,000,000 above the minimum requirements, which they can dispose of as they see fit.

(2) If the reserve city banks withdrew their entire payments from their central reserve agents, they would reduce their balances to about \$49,000,000. But we have presumed in our calculation that the reserve city banks will keep approximately \$53,000,000 on deposit with their present reserve agents, this representing the optional portion of their reserves which, between the twenty-fifth and thirtieth months, they may carry with reserve agents if they so elect. Upon this basis, there would be an overdraft of their reserve account of \$3,800,032.40. In other words, it would be impossible for the reserve city banks to follow out this plan of forcing the entire burden upon the central reserve city institutions. They could, however, if they so elected, withdraw their entire deposit from the central reserve city banks, depositing it with the Federal reserve banks. Although they would have no balance with their present reserve agents, they would, nevertheless, still have a sufficient cash reserve to meet the requirement of the law, for instead of carrying \$105,777,077.36, the minimum according to the Act, their cash holdings would be \$242,316,766.39. Thus their reserve would be much more than sufficient, since it is optional with them to keep all or any part of the amount which we have heretofore presumed would be left with the reserve agents, either with the latter, in their own vaults, or with the Federal reserve banks.

What Will Happen if the Country Banks Force the Entire Burden on the Others?—Finally there remains for consideration the assumption that the country banks will refuse to reduce their cash holdings in making payments to the Federal reserve banks, securing their entire contribution by drawing in equal proportions upon reserve agents in reserve cities and central reserve cities respectively; and that the reserve city banks themselves will hold the minimum cash reserves in their own vaults and in the reserve bank, the balance being kept with their central reserve agents. The result would be as follows:

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RESERVE CITY BANKS.

Assuming that country banks withdraw one-half of entire amount of their payment to Federal reserve bank from reserve city banks; and remainder from central reserve city banks.

	During the first twelve months.	Up to the 25th to 30th month period.
Net deposits (Oct. 21, 1913).....	\$1,915,160,396.96	\$1,915,160,396.96
Less country bank withdrawals.....	63,407,860.75	108,565,795.55
Net deposits subject to reserve.....	\$1,851,752,536.21	\$1,806,594,601.41
Made up of time deposits.....	146,889,314.89	146,889,314.89
And demand deposits.....	\$1,704,863,221.32	\$1,659,705,286.52
15 per cent reserve on demand deposits.....	\$255,729,488.20	\$248,955,792.98
5 per cent reserve on time deposits.....	7,344,465.74	7,344,465.74
Total minimum reserve requirements..	\$263,073,948.94	\$256,300,258.72
Of above banks must keep in their vaults..	\$105,229,579.58	\$102,520,103.49
And in Federal banks.....	52,614,789.78	102,520,103.49
Balance on presumption of smallest withdrawal of cash from central reserve cities, assumed to be left with present reserve agents.....	105,229,579.58	51,260,051.74
	\$263,073,948.94	\$256,300,258.72
Present cash holdings.....	\$242,316,766.39	\$242,316,766.39
New minimum cash holdings.....	105,229,579.58	102,520,103.49
Excess available for Federal bank payments.	\$137,087,186.81	\$139,796,662.90
Payments of reserve city banks to Federal banks:		
Reserve (as above).....	\$52,614,789.78	\$102,520,103.49
Subscription to stock.....	13,475,907.60	13,475,907.60
United States deposits.....	35,209,272.10	35,209,272.10
Payment account country deposits (as above)	63,407,860.75	108,565,795.55
Total payments to Federal reserve banks...	\$164,707,830.23	\$259,771,078.74
Excess cash available (as above).....	137,087,186.81	139,796,662.90
Deficit.....	\$27,620,643.42	\$119,974,415.84
To be withdrawn from central reserve cities	\$27,620,643.42	\$119,974,415.84
Against which they have balances.....	257,833,661.11	257,833,661.11
Credit balance remaining with agents..	\$230,213,017.69	\$137,859,245.27

Summarizing the results secured from the foregoing computation, the following analysis is presented, which shows the withdrawals and the balances which the reserve banks have on deposit with their central reserve agents, where they in turn take all of their payments to the Federal reserve banks from their reserve agents, and where they procure one-half of such payments in this manner:

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	During the first twelve months.		Up to the 25th to the 30th month period.	
	Taking one-half from their own vaults and one-half from central reserve agents.	Taking all from their reserve agents.	Taking one-half from their own vaults and one-half from central reserve agents.	Taking all from their reserve agents.
Present balances with reserve agents	\$257,833,661.11	\$257,833,661.11	\$257,833,661.11	\$257,833,661.11
Minimum withdrawals for payments to Federal banks (with no rediscounts)	82,353,915.12	164,707,830.23	129,885,539.37	259,771,078.74
Optional balance of 6/15 in first twelve months and 3/15 from 26th to 30th month, which presumably remains with present reserve agents	105,229,579.58	105,229,579.58	51,260,051.74	51,260,051.74
Surplus balance with reserve agents	70,250,166.41	.....	76,688,070.00	.....
Overdraft of balances with reserve agents .....	.....	12,103,748.70	.....	53,197,469.37

It should be borne in mind that the above analysis is based upon the assumption that the country banks have forced upon the reserve city banks and the central reserve city banks, equally, the burden of financing their payments to the Federal reserve banks. If the reserve city banks adopt a more liberal attitude than their country brethren, and furnish one-half of their payments from their own vaults, calling upon the central reserve institutions for the balance, we find that the balances with their reserve agents are sufficient for the purpose. As a matter of fact, even should they adopt this course, they would still have a surplus balance, over and above the required withdrawals, of over \$70,000,000. In the period of greatest stress, as regards the *required* cash payments to the reserve banks, in the twenty-fifth month, the balance would be much larger, amounting to almost \$77,000,000.

On the other hand, if we assume that the reserve city banks should take the stand that we have assumed for the country banks, *i.e.*, of drawing their entire payments from the central reserve institutions, we find that they would overdraw their accounts with the central reserve institutions. The overdraft during the first twelve months would amount to something over \$12,000,000, while by the time the twenty-fifth month had been reached the overdraft would have been over \$53,000,000.

During the first year this overdraft might be financed by rediscounts or in some other manner; but by the twenty-fifth month, if this plan were followed, the whole theory of this particular calculation would have fallen. The amount of the overdraft is greater by some \$2,000,000 than the optional balance of three-fifteenths which, at that time, the reserve city banks may keep in their own vaults, with the Federal reserve banks, or with their present reserve agents. If they should rediscount the entire amount of the overdraft (\$53,000,000), they would thereby have elected to keep this optional balance, not with their present reserve agents, but with the Federal reserve banks, and would have extinguished their balances with their central reserve agents.

What Will Probably Be the Course Followed?—Which one of the foregoing assumptions with reference to the reserve city banks will most nearly accord with the facts? Time alone can tell. To presume that the country banks and the reserve city banks will both insist upon maintaining intact their present cash balances is rather fanciful. These balances have been running up to a high figure in anticipation of a reorganization of the banking system, and there is no good business reason to support the assumption that the reserve city banks or the country banks will insist upon preserving them as they are. In all probability, the country banks will be more inclined to preserve a large cash balance than the reserve city institutions, because they have always done so. The reserve city banks, as a class, have heretofore kept practically nothing above the legal minimum. The people of the reserve cities are accustomed to seeing their banks keep practically the lowest amount of cash which is permissible; and the reduction to the new level, in the absence of some defect in the law or some industrial or financial disturbance, can probably be made without arousing distrust among the business public.

Perhaps some light can be thrown upon the perplexing question as to the amount of cash which the reserve city banks would release by considering the present situation. On October 21, 1913, these institutions were keeping \$250,506,000 in their vaults (including the redemption fund which they were then allowed to include), while they were required to carry, in round numbers, only \$239,395,000. The excess of \$11,111,000 is equivalent to .0058 per cent on the total deposits subject to reserve requirements at that time.

If, at the beginning of the twenty-fifth month, they should hold a sum equivalent to .0058 per cent of their deposits in excess of the legal minimum which, under the law, at that time they must hold in cash in their own vaults, the amount which would be thereby required as the additional vault surplus reserve would be as follows:

(1) Where the country banks finance themselves as far as possible from their own vaults, calling upon the reserve city and central reserve city banks, respectively, in equal amounts for such withdrawals as are necessary to finance the balance of their payments to the Federal reserve banks\$10,823,183.96

(2) Where the country banks finance one-half of their payments to the Federal reserve banks out of the surplus cash in their own vaults, calling upon the reserve city banks and the central reserve city banks in equal amounts for the balance...\$10,793,089.50

(3) Where the country banks force the entire burden of furnishing funds to make payments to the Federal reserve banks upon the reserve city banks and the central reserve city banks, respectively, in equal amounts\$10,478,248.69

Upon this general assumption we see, therefore, that the reserve city banks, if they maintain their present relative positions, would decide to keep a cash reserve over and above the new legal minimum of between \$10,000,000 and \$11,000,000. In other words, it is very probable that these institutions, unlike the country banks, will run their vault reserves down to within about ten million dollars of the new legal limit, and not force any larger burden upon the central reserve banks than is necessary. This might well be kept in mind in connection with the discussion which follows in the chapter on the central reserve cities concerning the probable extent of the demands which may be made upon these institutions by the other two classes of national banks.

Reserve City Banks in a Strong Position.—Whether the reserve city banks will draw upon their cash to the extent necessary to finance one-half of their payments to the central reserve banks can not be definitely foretold. But

this much is certain: the reserve city banks can, if they so elect, force the entire burden of financing the payments of both classes upon the central reserve city institutions, just as we have found the country banks could do. It does not require any calculation to foresee the tremendous load which would thus be forced upon the central reserve banks,—a burden whose real extent, however, can not be realized until the figures have been analyzed.

Of course this does not mean that every one of the three hundred and fourteen reserve city banks is in a position to pass the burden along to its reserve agents. It is possible that many of these banks are not in this particular as strongly fortified as the general average. If such is the case, the banks with the smaller proportion of available cash or smaller reserve balances can easily solve their problem by rediscounting.

Will the Reserve City Banks Have to Rediscount?—It should be emphasized that our examination of the operation of the reserve requirements up to this point has shown conclusively that it is not necessary for the country banks and the reserve city banks, as a whole, to rediscount in order to make the required payment to the Federal reserve banks. Both have ample resources without resorting to this practice. The country bankers, as we have seen, would probably be most willing to rediscount, since in many sections of this country this practice is already followed to some extent. The reserve city banks have, practically speaking, never rediscounted, and there has always been strong opposition to the practice on the ground that it was "bad banking." The passage of a law can not make over a banker's mind, and so long as this view continues it is not likely that the reserve city institutions will, as a whole, resort to the practice. Indeed the business motive for rediscounting, even though there should be no sentiment against it, is entirely lacking. Under the conditions which will probably prevail, the reserve city banks, even up until the end of the three-year period of adjustment, will have large balances on deposit with their central reserve agents. These balances,

like those of the country banks, have in the past been attracted by the interest of two per cent per annum paid by the central reserve city banks. While this rate is not very attractive, the money, if kept at home, would heretofore have been absolutely unproductive, and the interest offered has been sufficient to draw large sums to the central reserve cities.

It is to be hoped that the reader has kept clearly in mind that, in the preceding calculations, we have gone no further than the end of the thirtieth month in our study of the readjustment of reserves. No consideration has been given to the final steps occurring at the end of the third year, at which time the optional portion of the reserves of the reserve city banks, amounting to four-fifteenths of the total reserve, can no longer be carried with the old reserve agents. We have presumed throughout that the optional reserve will be carried throughout the three-year period with the present reserve agents. The effect which the shifting of this optional reserve at the end of thirty-six months, either to the vaults of the member banks or to the reserve banks, will have upon the banking situation of the country, must be left for consideration till a later chapter.

CHAPTER XXIV

THE RESERVE PROBLEM IN NEW YORK AND THE OTHER CENTRAL RESERVE CITIES

The Banking Situation in New York.—Nowhere in the world is there a banking situation such as exists in New York City. To a much smaller degree, the highly unique conditions prevailing in the American metropolis are found in the other two central reserve cities, Chicago and St. Louis. Fostered by a bank act which has put a premium upon the concentration of money in a few institutions neither designed nor especially equipped to act as central banks, and developed by the persistent work of two generations of exceedingly able men, the financial situation in New York has reached a pinnacle from which many believe it is about to topple.

Half of New York's Deposits Are Bankers' Balances.—New York is unique in that she is doing business to a large extent on the deposits of other banks. The aggregate deposits of her national banks, subject to reserve requirements, on October 21, 1913, were \$1,079,965,000, of which \$715,646,000 consisted of individual deposits and \$641,256,000 of bankers' deposits. Of the bankers' deposits, \$337,457,000 was due to other national banks, \$122,671,000 was due to State and private banks and bankers, and \$181,128,000 was due to trust companies and savings banks. The balance of the deposits of the national banks was made up of United States deposits, postal savings deposits, deposits of United States disbursing officers, etc. This tremendous total of deposits is held by thirty-six national banks.

The situation in Chicago, where there are nine national banks, is very similar. The individual deposits in that city aggregated \$215,663,000, while the bankers' deposits, to-

talling \$241,000,000, are made up of \$149,834,000 due to other national banks, \$76,698,000 due to State and private banks and bankers, and \$14,474,000 due to trust companies and savings banks.

In St. Louis, the seven national banks have individual deposits of \$62,318,000, and bankers' deposits of \$82,962,000, composed as follows:

Due to other national banks	\$53,600,000
Due to State and private banks and bankers	26,207,000
Due to trust companies and savings banks	3,155,000

The problem of St. Louis is the easiest of all to solve, because the liabilities of its national banks are very much smaller than those of the banks in the other two cities. Hence it is easier to finance their requirements, whatever time demonstrates them to be, because the proportion which the liabilities of these institutions bear to the liabilities of the institutions of the surrounding cities, which will probably be included in the St. Louis district, is much smaller than in the case of New York City. The same is true, though to a much less degree, in the case of Chicago.

Interest of Central Reserve Cities in Reserve Provisions.—It was openly charged by the Secretary of the Treasury that the fight against the Currency Bill in Congress was fostered and aided by the central reserve city banks, because of the tremendous stake which they had in the outcome of the struggle. Anyone who pictures for a moment the size of the bankers' deposits in the three central reserve cities, aggregating over \$965,000,000, as contrasted with the total individual deposits of the three cities, aggregating \$993,000,000, can understand that the central reserve city bankers, although they probably did nothing unpatriotic, felt the keenest anxiety as to the form which the Federal Reserve Act would take.

New York is the Storm Center.—In considering the effect of the partial or entire withdrawal of bankers' deposits in the central reserve cities, one's interest irresistibly centers upon New York City. Possessing the lion's share

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of these deposits, having been the subject of searching inquiry by Congressional committees and individuals, and having been the persistent object of banking reform crusades for a decade, it is not difficult to understand the tremendous interest which surrounds the question as to what effect the Currency Act will have upon that city. Every one agrees that New York's problem is the most serious for solution; if it can be handled, there need be no doubt as to the successful readjustment of affairs in Chicago and St. Louis. While there are thirty-six national banks in New York City, most of which by comparison with banks in other cities are of very considerable size, yet, relatively speaking, New York City is composed of a few very large banks, and a number of much smaller institutions. The very large banks have achieved their unusual size partly because of the influence and ability of their staffs, and more particularly of their directorate, in attracting individual deposits. These banks have also been persistently active in securing bankers' deposits.

Widespread Affiliations of New York Banks.—Some idea of the tremendous scope of the affiliations of the New York banking institutions can be secured from the following data furnished by them to the Pujo Money Trust Investigating Committee in the fall of 1912:

OUT-OF-TOWN BANK DEPOSITORS

Bankers Trust Company	237
National Bank of Commerce	1,671
Chase National Bank	3,103
First National Bank	579
Guaranty Trust Company	182
Hanover National Bank	4,074
Liberty National Bank	312
Mechanics & Metals National Bank	1,010
National City Bank	1,889
National Park Bank	2,426
Total	15,483

When we consider that there are about 25,000 banks in the country, and that these ten institutions have accounts

with over 15,000 of them, we understand clearly why New York is the center of financial America, and why any disturbance there works such widespread havoc. Of the ten institutions given above as having large banking affiliations, eight are national banks. As a matter of fact, in discussing the matter of bankers' deposits, the custom has grown up in New York of referring to the "Big Six," a term which applies to the national banks just named, with the exception of the Liberty National and the Mechanics and Metals National Bank. It should not be inferred, however, that the ten institutions listed are the only ones in New York which carry bankers' deposits.

Bankers' Deposits of Big New York Nationals.—The exact status of each of the eight national banks, with regard to the matter of bankers' deposits, and the proportion of such deposits which they hold as compared with the other banks of New York City, is shown in the following table:

	No. of out- of-town bank de- positors Nov. 1, 1912.	Bankers' de- posits (000 omitted) Oct. 21, 1913.	Individual deposits (000 omitted) Oct. 21, 1913
National Bank of Commerce...	1671	\$66,562	\$58,663
Chase National	3103	75,995	38,719
First National	579	54,911	47,616
Hanover National	4074	66,342	25,539
Liberty National	312	14,197	12,711
Mechanics & Metals National..	1010	30,034	29,685
National City Bank	1889	92,454	108,567
National Park Bank	2426	61,688	39,505
Total	15,064	\$462,183	\$361,005
Total deposits in all National Banks in New York City..		\$641,256	\$715,646

Of the thirty-six national banks in New York City, the eight institutions listed above are by far the most important. Their capital and surplus aggregate sixty-seven per cent of the total capital and surplus of all of the national banks in the city. They hold fifty per cent of the individual deposits and seven-two per cent of the bankers'

deposits. The problem, whatever it may be, of readjusting the reserves to meet the requirements of the Federal Reserve Act will concern most especially these eight institutions.

Vicious Results of Paying Interest on Bankers' Balances.—Nowhere are the defects and limitations of the old system of deposited reserves so clear as in the case of New York City. We have already commented upon the practice of the New York banks in paying interest upon bankers' deposits, and have noted the vigorous criticism of the matter by the New York Clearing House Committee following the panic of 1873. Very few bankers will contend that there is any large amount of money made by the central reserve city banks directly from bankers' deposits. They are largely the result of a consistent campaign to attract them, continuously conducted over a series of years, and more especially they are held by the payment of two per cent per annum interest on such accounts. When to the interest of two per cent is added the cost of handling such funds, variously estimated by bankers as from one to two per cent, it will be seen that if a bank hopes to avoid a loss upon the transaction, it must see to it that these funds are, as nearly as possible, constantly employed. In view of this necessity, the national banks, as a class, have for years kept on hand a very small amount of cash over and above the minimum reserve requirement. The proportion of the reserves of the banks which heretofore have been of use to them in meeting extraordinary demands consists of the surplus over and above the legal minimum. When the reserve of the bank runs below the minimum, the institution must, under the law, cease making discounts or loans, which, in substance, means that the customary channels of funds to finance business are suddenly dried up.

New York City Banks Have Been Central Banks.—The New York City banks have, in a rough way, been central institutions for many years. Eight of them have carried a considerable proportion of the secondary reserve of

15,000 institutions, just as the Bank of England and the Bank of France carry the secondary reserves of other institutions. The New York banks have, to a limited degree, rediscounted for these banks and made loans to them. They have acted as media for the collection of out-of-town checks, and for the payment of intersectional debts through the sale by the country bank to its customers of drafts drawn by it upon its accounts in these institutions. It is true that this comprises only a part of the functions of a central bank; and that, in many respects, the central reserve city banks have never possessed the powers essential to any really effective central institution, such as, for example, the power of note issue upon assets other than government bonds. But these limitations, of which this is but an illustration, would serve to emphasize the importance on the part of these institutions of exercising even greater care than would be necessary with foreign banks, which could perhaps afford to carry lower reserves, because they could prevent impairment of reserves through their ability to issue notes against their assets.

Reserve Policy of New York Banks.—The reserves of the New York banks on or about October 1 of each year from 1883 to 1901, inclusive, averaged 28.8 per cent, and in the fall months from 1902 to 1912, inclusive, they averaged 26.4 per cent. In the first period the reserve was 3.8 per cent above the legal minimum, while in the latter period it was only 1.4 per cent above that minimum. If we compare these reserves with those held by foreign banks, we can see one of the most important reasons why the New York institutions are so helpless in times of financial stress. We must bear in mind that the foreign banks are not required to keep any specified minimum reserve against their deposits, and yet they customarily carry a very much higher reserve than that which has for years been carried by the central reserve city banks, even though the foreign banks are in a much better position to take care of their business. The Bank of England carries habitually from forty to fifty per cent

reserve against its demand liabilities. The Imperial Bank of Germany carries a reserve in the neighborhood of seventy per cent in gold against its notes, and a reserve of fifty per cent against its notes and deposits. The Bank of France carries a reserve of about seventy-five per cent of coin against notes and deposits.

It is small wonder, in view of the very much larger reserves which are carried abroad, that the effectiveness of the foreign banks is so much greater than that of our central reserve city institutions. The Bank of England has no power, generally speaking, to issue notes except against gold, and such notes when issued are really nothing more than warehouse receipts. Even without the power of issuing asset currency, this is the greatest bank in the world, and has earned for itself, by its remarkable performance extending over generations, the admiration and confidence of the entire world.

Collateral Loans vs. Commercial Paper.—Unlike the foreign banks, the central reserve city national banks have not extensively invested their funds in commercial paper. Their inability to rediscount this paper or to issue notes against it, which in effect would accomplish the same result, has forced them to adopt the practice of investing a large proportion of their funds in call loans. In other words, they have followed the practice of keeping a cash reserve very close to the minimum specified in the law, relying for protection upon their secondary reserve, which is made up largely of call loans. In ordinary times, this plan works reasonably well. Banks whose reserves fall below the legal level can call loans, which are largely repaid by the borrower shifting the loans to other banks. But experience has demonstrated over and over again that in times of great stress or panic, when the great majority or all of the banks are forced to contract, the call loan is inconvertible. Borrowers have no place to turn, and if the banks should force them to sell their collateral, the bottom would drop out of the stock market and the banks themselves would be ruined

by the disappearance of the value of the collateral which they hold.

Mr. Charles P. Blynn, Jr., President of the Massachusetts Bankers' Association, in testifying before the Senate Committee, made the following comment upon this point. "The central reserve banks, being the custodians of the reserves of the country, have been compelled to carry, in addition to the twenty-five per cent required by law, a reserve of thirty-five or thirty per cent more. They (the central reserve banks) carry loans which are quickly convertible and that is why we have grown into making stock exchange loans. There is a preconceived idea that New York banks loan on stock exchange collateral because the management of the banks are interested in the stock exchange. They loan on stock exchange collateral because that offers them the best form of reserves."

Relations of New York Banks with Stock Exchange Operations.—Entirely too much emphasis has been placed by many critics of the New York situation upon the motives of the New York bankers, and upon the great prominence which stock exchange operations play in their affairs. There is no doubt that the very close connection between the loans of the New York City banks and speculation on the stock exchange has been harmful to the country at large and to the New York banks themselves; but to assert that the New York banks have voluntarily created this condition, because of some improper interest in the operations of the Exchange, or to give the impression that loans by the New York banks, particularly by those holding bankers' deposits, are almost entirely upon stock exchange collateral, would be very misleading.

Distribution of Loans of New York Banks.—Mr. Alexander Gilbert, President of the Market and Fulton National Bank of New York City, submitted the following figures which he had procured, and which show in detail, better than anything else, the character of the loans made by the large financial institutions of New York City:

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Distribution of loans and discounts made by 30 of the largest banks and trust companies in New York City, each having approximately \$20,000,000 or more of loans and discounts, and aggregate loans and discounts of \$1,226,974,500, at close of business September 24, 1913.


First, loans made to Wall Street brokers for banks outside of the city of New York.....	\$174,945,900
Second, loans made to Wall Street brokers for banks' own account	\$264,383,800
Third, other loans, discounts, and advances of every nature distributed geographically as below:	
Total Eastern States: Northeastern States—Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut; Eastern States—New York State, Pennsylvania, New Jersey, Maryland, District of Columbia, and Delaware.....	617,830,800
Total Southern States: Southern States—Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Kentucky, Tennessee, Texas, and Arkansas....	174,140,500
Total Western States: Middle Western States—Ohio, Indiana, Illinois, Michigan, Wisconsin, Minnesota, Iowa, and Missouri; Western States—North Dakota, South Dakota, Nebraska, Kansas, Montana, Wyoming, Colorado, Oklahoma, and New Mexico; Pacific States—Washington, Oregon, California, Idaho, Utah, Nevada, and Arizona..	167,720,600
Foreign: Canada, etc.	2,898,800
Total banks' own loans	\$1,226,974,500

Direct Lending by Out-of-town Banks.—The first item in this table deserves a brief explanation. Of late years, largely as a result of the competition between the State banks and trust companies, the practice has grown up of country banks lending money directly on the market, at times when the call loan interest rates are attractive, the New York banks acting as their agents in making the loans. Thus the country banks have a double relation to the stock market in New York: (1), the more indirect one in which the funds which they have deposited with the New York banks are loaned, in whole or in part, by the latter as though it were local deposits, direct upon the market; and (2) the direct one in which the country bank, through the New York bank as agent, will lend in its own name any surplus

funds which it may have on deposit with the New York bank. This practice adds considerably at times to the profits of the country banks upon their New York balances, or upon that proportion of their balances over and above the legal reserve which they must keep, in order, when added to their cash holdings, to equal the required fifteen per cent.

However, when the country bank is crowded for money it will call its direct loans. When these are paid, the money is credited to the account of the country bank upon the books of its New York correspondent, thereby raising its reserve by this amount, and accomplishing the purpose which prompted the calling of the loan. If the country bank so desires, it can telegraph its New York correspondent to ship cash, charging the shipment against its newly replenished balance. So far as the New York banks are concerned, it is, in effect, like transferring money from one pocket to another, for the cash with which the New York borrower repays the direct loan of the country bank must, to a large degree, be procured by negotiating another loan with a New York City bank. Thus, in so far as the total supply of money in New York City is concerned, the direct loans are, in times of stress, a source of great worry and danger.

Proportion of Loans to Brokers.—According to Mr. Gilbert's calculations, the New York City banks themselves, for their own account, had loaned the Wall Street brokers, on September 24 last, only \$264,000,000 out of total loans made by them of some \$1,226,000,000, or about twenty-one per cent of the total. The majority of loans, he claims, are made to individuals, firms and corporations outside of New York City, over half of the total loans being in the eastern States. Mr. Gilbert asserts that seven-eighths of these loans are made upon commercial paper and securities. His tabulation is doubtless correct in the main, but there is a sufficient difference between the impressions which one would get from his calculation and that which arises if we examine the figures at as late a date as possible for indi- ➤



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vidual banks, to warrant the insertion of the following comparison, based upon the investigations of the accountants of the Money Trust Investigating Committee. This shows the total deposits of the out-of-town banking correspondents with the eight national banks mentioned therein, the direct loans which these banks had made for these correspondents upon stock exchange collateral, and the loans of each New York City bank, upon time or demand, on such collateral on November 1, 1912:

	(000 omitted)		
	Deposits by correspondent.	Direct loans for correspondent.	Bank's own loans.
National Bank of Commerce...	\$42,909	\$18,080	\$38,230
Chase National	70,007	57,990	34,915
First National	40,127	43,454	42,275
Hanover National	47,145	5,414	11,045
Liberty National	7,414	1,810	11,543
Mechanics & Metals National...	17,910	4,220	13,502
National City	75,172	10,200	84,788
National Park	49,058	14,808	37,375
Total	<u>\$349,742</u>	<u>\$155,976</u>	<u>\$273,673</u>

Country Money and the Stock Exchange.—The tremendous amount of country money which is loaned out on stock exchange collateral is clearly seen from the above comparison. The country banks have on deposit with their correspondents approximately \$350,000,000, while in addition they have loaned on stock exchange collateral \$155,000,000, making a total in excess of \$500,000,000 in New York City at that time. Of the deposits of the out-of-town correspondents with New York, \$273,000,000, or almost eighty per cent of the total, have been similarly loaned. This exceeds somewhat the amount of such deposits which the New York banks can loan and still keep the required twenty-five per cent reserve against them. Accuracy, however, demands that it should be noted that bank loans on stock exchange collateral are not to be viewed entirely with relation to out-of-town deposits, since, as we have seen, the banks have very large resources aside from these deposits.

Partiality to Collateral Loans.—After all, the main thing for our purposes is not whether the New York banks have been unduly wedded to stock exchange loans, whether they have stimulated stock exchange operations by pursuing to an extreme degree the policy of call loans, or whether it is a good or bad thing for the country to have the present situation as it exists in New York. The most important lesson of the New York situation is not to be learned from the degree of intimacy of the banks with the stock exchange, but the extent to which their resources are tied up in loans upon collateral rather than investments in commercial paper. The exact situation is to be seen from the following compilation of the Comptroller of the Currency, as of June 14, 1912, showing how the loans of the national banks of New York City were made up:

On demand, paper with one or more individual or firm names	* \$17,796 .
On demand, secured by stocks, bonds, and other personal security	326,897
On time, paper with two or more individual or firm names	171,791 .
On time, single name paper (one person or firm) without other security	219,172 .
On time, secured by stocks, bonds, or other personal security, or on mortgages or other real estate security..	223,410
<hr/>	
*000 omitted.	\$959,068

New York Banks Largely Commercial Banks.—Of late the New York banks have awakened to the importance of the fact that they are great investors in commercial paper. The National City Bank, the largest bank in New York City, and, in fact, in the United States, in its monthly circular for December, 1913, emphasizes the importance of commercial loans in its business, and appends the following classification of loans, showing in the first column, as of December 6, 1912, the results which it reported to the Money Trust Investigating Committee, and in the second column, as of November 25, 1913, the loans as then outstanding:

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	Dec. 6, 1912.	Nov. 25, 1913.
Amount of loans to merchants and manufacturers, not secured by collateral	\$39,140,509.18	\$59,240,371.02
Amount of loans to depositors and others, not members of the Stock Exchange, on collateral	44,156,658.50	41,166,743.00
Amount of demand loans to members of the Stock Exchange on stock exchange collateral	27,681,320.01	28,591,000.00
Amount of time loans to members of the Stock Exchange on stock exchange collateral	1,475,000.00	735,000.00
Amount of loans and re-discounts to interior banks and trust companies on collateral (mostly bills receivable) ...	7,869,000.00	14,180,106.25
Amount of unsecured loans		1,599,464.00
Amount of loans on merchandise	798,866.00	965,777.95
Total net deposits	150,789,555.00	175,843,367.00

Excluding Stock Exchange Demand and Time Loans, the loans of November 25 are distributed as follows:

Eastern States:	To banks	\$1,358,000
	To others	61,321,777
New England States:	To banks	10,000
	To others	3,643,000
Middle States:	To banks	2,606,000
	To others	21,841,000
Western States:	To banks	760,000
	To others	728,000
Pacific States:	To banks	767,000
	To others	1,662,000
Southern States:	To banks	11,300,000
	To others	8,719,000
Foreign:		1,930,000

The most important class of loans of this great bank, which may be taken as generally typical of all the banks of New York, is seen to be the loans to merchants and manufacturers not secured by collateral; while the loans on stock exchange collateral, which were made to depositors and others not members of the stock exchange, follow next in importance, the two aggregating over sixty per cent of the total loans of this institution. As a matter of fact, the loans to members of the stock exchange amount only to \$29,326,000, or approximately twenty per cent of the total loans of the bank. When we consider the fact that good banking has, up until the present time, required the keep-

ing by an institution of this character of a secondary reserve of demand loans, for we can readily see that this bank, popularly supposed to be one of the shining examples of a stock exchange institution, is, after all, a great commercial bank in so far as the character of its borrowers is concerned. These facts are presented here at length for the purpose of showing the very great importance to the commercial interests of the country of the satisfactory readjustment of the reserve problem of the central reserve cities. The banks of these cities, as a whole, are playing a vital and most important part in the commercial lending of this country, and if they are seriously embarrassed or crippled in their commercial business by the change which is impending, then the reserve provisions of the Federal Reserve Act are unwise and dangerous.

The Problem before the Large Borrower.—The problem is essentially one of the large borrower who has built up a market for his paper with the very large banks in New York City. Heretofore, such borrowers,—dealing either directly with the banks in the central reserve cities or through the note brokers,—have placed their paper with these institutions. If this money, a large part of which is composed of the reserves of other cities, is to be withdrawn and put into the Federal reserve banks, which can only place the money at the disposal of business by rediscounting such paper as may be offered to it by member banks, what effect will this have upon business? The most serious question, in many ways, connected with this matter of reserves, was asked by Mr. George M. Reynolds in his examination before the Senate Committee:

“Mr. Reynolds: Would it be practical for some large concern that needs to borrow \$40,000,000, or \$50,000,000, to write to a thousand banks in the Dakotas and see how much of surplus money in the Dakotas they could borrow?

“Senator Crawford: Of course not. The question is this—

“Mr. Reynolds: I am only putting it to you as a matter to think over. I want to get it into the record, and I want

you to give careful consideration to it. In our city and all over this country there are industrial enterprises that have been assisted in their development and growth very largely by the dependence on these lines of credit received through the larger banks throughout the country, and if we are left in such a condition that we must discontinue that, then it is a matter for you to decide how best to solve the problem so that they can go ahead with their business. I know you want to solve it for them. I am only bringing this point up as one that I have not seen any solution for in the bill. I have no doubt but it can be worked out.

“Senator Hitchcock: Do you mean to take the position, Mr. Reynolds, that this would be a permanent embarrassment to the banks and to the borrowers, or only a temporary embarrassment while the new system is being put into operation?

“Mr. Reynolds: I did not describe it by the words ‘permanent embarrassment.’ I hope you will not get it in the record as putting me quite in that light. It will be no embarrassment to the banks, because the banks will very quickly adjust themselves to changed conditions, if they are a party to this plan. Then the public itself will have to adjust itself to the new conditions. If those people who have had to borrow \$50,000,000 under the new order of things are only able to borrow a part of that amount, they will have to restrict their business. If that is best, that will be satisfactory to me. But, as I say, it is a matter that will have to work itself out, and it gets back to the public, as I have said two or three times before. Whatever you do, the bankers are going to be all right, because they are going to adjust their affairs to conditions, but I hope general business will be protected.”

CHAPTER XXV

THE SHIFTING OF RESERVES IN THE CENTRAL RESERVE CITIES

Tremendous Burden on Central Reserve Cities.—What will be the extent to which the present balances in the central reserve city banks will be reduced as a result of the new reserve requirements, and how will this shifting of reserves affect these banks and the communities which they serve? This is one of the most absorbing questions connected with the whole matter of the probable operations of the Federal Reserve Act. We have traced at length the requirements which must be met by the country banks and the reserve city banks and have determined, as far as possible, the ways in which these two classes of institutions can finance their needs, and the probable extent of their withdrawals from the central reserve institutions. How will these tremendous demands—for they aggregate a staggering total even under the most favorable assumption—affect the central reservoirs of our national banking system in New York, Chicago and St. Louis? In order to answer this question, it is necessary to sum up the results secured in our preceding inquiries under each of the several assumptions, one of which time may show to accord with actual conditions.

New Reserve Requirements.—Before doing so, however, let us note the changes in the reserve requirements for banks in the central reserve cities under the new Act. Heretofore these banks have been required to keep as a minimum a twenty-five per cent reserve. The Federal Reserve Act specifies that, "a bank in a central reserve city, as now or hereafter defined, shall hold and maintain a reserve equal to eighteen per centum of the aggregate amount of its demand deposits and five per centum of its time deposits, as follows:

"In its vaults six-eighths thereof.

"In the Federal reserve bank seven-eighths.

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"The balance of said reserves shall be held in its own vaults or in the Federal reserve bank at its option.

"Any Federal reserve bank may receive from the member banks as reserves, not exceeding one-half of each installment, eligible paper as described in Section 14 properly indorsed and acceptable to the said reserve bank."

Perhaps the following summary may be of assistance to the reader:

Amount required to be kept in the bank's vault	6/18
Minimum balance on deposit with the Federal reserve bank	7/18
Optional balance which may be divided between bank's vault and the reserve bank	5/18

Various Possibilities Concerning Extent of Withdrawals.—In order to get the problem as it affects the central reserve city banks clearly in mind, the assumptions on page 299, based upon the results of our previous calculations, are inserted. The letter "C," standing before the figures in either column, refers to the withdrawals of the country banks under this particular assumption, while the letter "R" refers to the withdrawals of the reserve city banks.

It is not intended in any way to convey the impression that these five assumptions cover every possible contingency which may arise. There are a number of courses which would be open to the country banks and the reserve city banks, representing intermediate stages between the several steps included in these assumptions. If one of these intermediate courses was followed the total withdrawals would be between some two of the amounts specified. To endeavor to cover every contingency would require an enormous amount of calculating, which would not clarify the issue, unless one could foresee exactly the course which events would take. The five assumptions given are included for the purpose of showing, in a very general way, the problem as it will unfold to the central reserve city banks. The conclusions developed on one of these assumptions may happen to accord with what will occur, but it is probable

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NOTE.—In each of the following, the present deposits with reserve agents are presumed to remain intact, except as modified by specific statements. Federal reserve bank deposits are always at the minimum specified by law. In every case, the withdrawals of country banks are presumably equally divided between the reserve cities and the central reserve cities.

ASSUMPTIONS

	Withdrawals from central reserve city banks by the end of first year.	Aggregate with- drawals from central reserve city banks by end of 30 months.
ASSUMPTION No. 1: Where the country banks and reserve city banks as a class supply their contributions to the Federal reserve banks from their excess cash in their own vaults so far as possible	Probably nothing	C- \$49,094,195.99 R- 67,639,408.22 \$116,733,604.21
ASSUMPTION No. 2: Where country banks furnish one-half of the contribution to the reserve banks, withdrawing the balance from the reserve city and central reserve city banks in equal proportions, and where the reserve city banks finance their own requirements as well as the withdrawals of country banks from their excess cash holdings, over the required reserve, in so far as possible.	C- \$31,708,930.37	C- \$54,282,897.77 R- 72,205,465.79 \$126,488,363.56
ASSUMPTION No. 3: Where the country banks withdraw their entire contributions from the reserve city and central reserve city banks in equal proportions respectively, the reserve city banks financing their own contributions and withdrawals of country banks, as far as possible, from their excess cash holdings, over the required reserve.	C- \$63,407,860.75 R- 27,620,643.42 \$91,028,504.17	C- \$108,565,795.55 R- 119,974,415.84 \$228,540,211.39
ASSUMPTION No. 4: Where the country banks and the reserve city banks as a class each supply from their cash holdings one-half their payments to reserve banks withdrawing the balance as follows: (a) in the case of the country banks one-half from the reserve banks and one-half from the central reserve city banks, respectively, (b) in the case of the reserve city banks the entire withdrawal, namely, one-half of their contribution, of necessity must be from their central reserve agents.	C- \$31,708,930.37 R- 66,977,608.89 \$98,686,539.26	C- \$54,282,897.77 R- 104,372,577.42 \$158,655,475.19
ASSUMPTION No. 5: Where the country banks and the reserve city banks each, as a class, insist on maintaining their present cash holdings, the country banks drawing their payments in equal proportions from the reserve and central reserve agents respectively, while the reserve city banks withdraw their entire contributions from the central reserve city banks up to the amount of their reserve balances if necessary.	C- \$63,407,860.75 R- 164,707,890.23 \$228,115,690.98	C- \$108,565,795.55 R- 257,583,661.11* \$366,399,456.66

* To carry out this assumption, the reserve city banks should withdraw \$359,771,078.74, but inasmuch as their balance is only \$257,583,661.11, we must confine the withdrawals to the latter figure.

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that none will be exactly correct, and that between some two of them will lie the final result.

Difficulty of an Exact Estimate.—However, if we look at the matter from the stand-point of the best and the worst that can happen to the New York banks, it seems practically certain that the above assumptions will serve as a basis for our conclusions. The first is the most favorable turn which affairs could take for the New York banks, while the fifth is the most unfavorable for them. All assume that the surplus balances, whatever they may be, of the country banks and of the reserve city banks, which they will not need in meeting their payments to the Federal reserve banks, will be left on deposit with their present reserve agents in the central reserve cities. Of course, if the country banks and reserve city banks should follow the policy of entirely withdrawing their present deposits in New York City, the situation would be worse than even the fifth assumption. However, the reader, if he cares to do so, can easily work out from the information contained in the preceding chapters the extent to which the load on the central reserve city banks would be increased. This contingency is so unlikely to occur at this stage, however, that it is not worth while to present the results in detail. As we have seen, the country banks and the reserve city banks will for a considerable period keep their balances in New York City because they bring them positive business advantages.

Withdrawals During the First Year.—Upon the basis of the above assumptions let us work out the trend which affairs will take for the central reserve city banks. The table on page 301, calculated by the same method used in our investigations of the country banks and reserve city banks, shows in detail the effect of each assumption upon the central reserve city institutions during the first twelve months.

Ability of Banks to Handle these Withdrawals.—It has been assumed throughout this calculation that central reserve city institutions would make their payments to the Federal reserve banks in cash, in so far as possible. This assumption has been followed in the case of the two

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Central reserve city banks.	Assumption 1.	Assumption 2.	Assumption 3.	Assumption 4.	Assumption 5.
Net deposits.....	\$1,541,019	\$1,541,019	\$1,541,019	\$1,541,019	\$1,541,019
Less country and reserve city withdrawals.....	.....	31,703	91,029	98,581	228,116
Net deposits subject to reserve.....	\$1,541,019	\$1,509,316	\$1,449,990	\$1,442,338	\$1,312,903
Time deposits.....	15,549	15,549	15,549	15,549	15,549
Demand deposits.....	\$1,525,470	\$1,493,767	\$1,434,441	\$1,426,789	\$1,297,354
Reserve on demand deposits 18 per cent.....	\$274,585	\$268,878	\$258,199	\$256,522	\$233,524
Reserve on time deposits 5 per cent.....	777	777	777	777	777
Total minimum reserve requirements.....	\$275,362	\$269,656	\$258,976	\$257,299	\$234,301
Of above keep 6/18 in vault.....	\$1,787	89,888	86,325	86,587	78,109
Of above keep 7/18 with Federal bank.....	107,086	104,866	100,713	100,177	91,117
Balance 5/18 with Federal bank or in vault.....	\$76,490	\$74,904	\$71,938	\$71,555	\$65,084
Payments to Federal bank for:					
1. Reserve 7/18.....	\$107,086	\$104,866	\$100,713	\$100,177	\$91,117
2. Subscription to stock.....	10,425	10,425	10,425	10,425	10,425
3. United States deposits.....	11,944	11,944	11,944	11,944	11,944
4. Withdrawals of reserve city and country banks.....	.....	31,703	91,029	98,581	228,116
Total cash payment.....	\$129,454	\$158,938	\$214,111	\$221,227	\$341,602
Present cash (specie and legal tenders).....	\$376,886	\$376,886	\$376,886	\$376,886	\$376,886
Less now reserve required in own vaults 6/18.....	\$1,787	89,888	86,325	86,587	78,109
Balance.....	\$385,099	\$287,001	\$290,561	\$291,019	\$298,786
Less Federal bank payments (above).....	129,454	158,938	214,111	221,227	341,603
Balance.....	\$155,645	\$128,063	\$76,450	\$69,792	\$57,183
Less reserve cities in vault or Federal bank 6/18.....	76,580	74,904	71,938	71,555	65,084
Surplus.....	\$79,165	\$53,159	\$4,513	.....	.....
Deficit.....	.....	.....	.....	\$1,763	\$107,901

Notes: In \$1000 omitted.

preceding groups of banks. The purpose of this method is to ascertain the size of the resulting deficit, which will determine the extent to which rediscounting must be done. Under the first assumption, which is the most favorable to the central reserve city banks, we find that they would not be required to do any rediscounting during the first year, but would have a surplus of over \$79,000,000, after meeting the withdrawals of the other classes of banks.

In the second assumption, under which the country banks withdraw one-quarter of their payments from the central reserve city institutions and the reserve city institutions finance their requirements, from their own vaults, the central reserve city institutions would still not have to rediscount, having at the end of the first year over \$53,000,000 of surplus cash.

In the third assumption, under which the country banks withdraw their entire contributions from their reserve agents, taking half thereof from the central reserve city banks, and where the reserve city banks finance themselves, as far as possible, from their own vaults, the central reserve institutions would still be able to handle the situation during the first year from their own cash holdings, the surplus having been reduced, however, to something over \$4,000,000.

When we come to our fourth assumption, where the country banks withdraw one-half of their payments from the central reserve city institutions and the reserve city banks in equal proportions, making up the balance of their payments to the Federal reserve bank from the surplus cash in their vaults, while the reserve city banks withdraw one-half of their contributions from their central reserve agents, we find that we have taxed the central reserve city institutions to their limit. As a matter of fact they would have a deficit of almost \$2,000,000. This could be handled, of course, by very small rediscounts. These rediscounts could be made either as a part of the payments to the Federal reserve bank on account of reserves required to be deposited with them, or they could be made by independent rediscounts, without reference to any readjustment of reserves.

No Difficulty During First Year.—Putting the matter in the worst light for the central reserve city banks (save that the other classes of national banks will withdraw more than is necessary to meet their payments to the Federal reserve banks), we find that under our fifth assumption where the country banks and the reserve city banks each, as a class, insist on maintaining their present cash holdings, the country banks drawing their payments in equal proportions from the reserve and central reserve agents respectively, while the reserve city banks withdraw their entire contributions from the central reserve city banks up to the amount of their reserve balances, if necessary, the central reserve city institutions would have to rediscount to the extent of \$108,000,000 during the first twelve months. The central reserve city banks will be required to make payments to the Federal reserve banks of something over \$91,000,000, representing the required reserve which must be kept with them; \$65,000,000, constituting the optional reserve, may be kept in cash in their vaults or on deposit with the reserve banks, in whole or in part. Under circumstances where heavy rediscounting is necessary, it would be advantageous for the central reserve city banks to keep the optional reserve with the reserve banks, because one-half of it can be created on the books of the reserve banks by rediscounting commercial paper. If this view is correct, the total reserve payments to the Federal reserve institutions would probably amount to \$156,000,000, against which it would be necessary to rediscount to the extent of \$108,000,000. If the central reserve city banks endeavored to meet this problem by rediscounting to meet their reserve requirements, they would find themselves unable to handle the situation. With total payments of \$156,000,000 to the Federal reserve banks they would be allowed (under the provisions of the Act permitting them to make one-half of their reserve payments through rediscounting) to rediscount only \$78,000,000 of paper. This would leave a deficit of \$30,000,000 still to be provided for. A liberal interpretation of the Act would enable the central reserve city institutions to rediscount at

least this much paper, nominally without reference to any reserve requirement. If the Federal reserve banks and the Federal Reserve Board take this view, it will be possible, with the consent of these bodies, to meet the problem entirely by rediscounting.

Ways in which Problem Can be Handled.—No account has been taken in the above calculations of any reduction in the liabilities of the banks through the calling of loans, the sale of securities or the failure to renew commercial paper now held by them, which would place them in funds with which a part of their obligations could be met. We will leave the discussion of this phase of the matter until we have examined the position of the New York banks at the period of greatest strain.

Beginning with the twenty-fifth month the reserve payments of all classes of national banks will reach their maximum, both as regards the cash in their vaults and payments to the Federal reserve institutions. From the end of the twenty-fifth to the beginning of the thirty-sixth month, after the establishment of the Federal reserve banks, all classes of banks will be holding the maximum vault reserve, while the deposited reserve with the Federal reserve banks will have reached the maximum specified by the law. This is a crucial point in the problem of readjustment, and if it is safely passed the country may feel reasonably certain, barring some unforeseen contingency, that the condition will steadily improve thereafter.

Problem of Readjustment Primarily a Problem of Securing Cash.—The problem of readjusting reserves is primarily a problem of securing cash. When the necessary supply has been acquired by the reserve banks the crucial point has been passed. Of course, we must remember that after thirty-six months from the establishment of the Federal reserve bank, of which each particular institution is a member, the optional reserve, which we have presumed will be left with the present reserve agents, must be transferred to the bank's vaults or to the Federal reserve bank. What effect this change will have upon the central reserve city

banks is not considered in this connection, but is treated in the succeeding chapter.

Stress at the Beginning of the Twenty-fifth Month.—During the interval from the twenty-fifth to the thirty-sixth month, the effect of the new reserve requirements upon the central reserve city banks, under each of our five assumptions, would be as is shown on page 306.

Necessity for Rediscounts.—At a glance we see that throughout this period the central reserve city banks, under every assumption, will have a deficit. In other words it will be impossible for them to finance out of the surplus in their vaults, released by lower reserve requirements, the demands which will be made upon them in each case by the reserve city and country banks. Again we have assumed that the central reserve city banks will endeavor, in so far as is possible, to make their payments to the Federal reserve banks out of the cash in their vaults, resorting to rediscounts only when and to the extent that may be necessary. While this is contrary to what will actually occur, because the central reserve city institutions, seeing that they must rediscount, may begin to do so at an earlier date, yet for our purpose it is the most satisfactory way to work out the calculation. After all, what we are endeavoring to ascertain is the extent to which rediscounts will be necessary in order to enable the central reserve city banks to handle their part of the problem. The difference in the results under each assumption, of course, is determined, as in the preceding calculation concerning the first twelve months, by the extent of the withdrawals by the country and reserve city banks. These withdrawals range from some \$116,000,000 to \$366,000,000 and \$250,000,000 will probably cover every reasonable contingency. This difference determines almost directly the extent to which the central reserve city institutions may rediscount.

Can the Banks Finance these Withdrawals through Rediscounts?—Under the first assumption, where the reserve city and country banks withdraw as little as possible, financing themselves from their own vaults as far as possible,

Central reserve city banks (25th-30th month.)	Assumption 1.	Assumption 2.	Assumption 3.	Assumption 4.	Assumption 5.
Net deposits.....	\$1,541,019	\$1,541,019	\$1,541,019	\$1,541,019	\$1,541,019
Less country and reserve city withdrawals.....	116,734	126,488	228,540	158,555	366,399
Net deposits subject to reserve requirements.....	\$1,424,285	\$1,414,531	\$1,312,479	\$1,382,364	\$1,174,620
Time deposits.....	15,549	15,549	15,549	15,549	15,549
Demand deposits.....	\$1,408,736	\$1,398,982	\$1,296,930	\$1,366,815	\$1,159,071
Reserve on demand deposits 15 per cent.....					
Reserve on time deposits 5 per cent.....	\$253,573	\$251,817	\$233,447	\$246,028	\$208,633
Total minimum reserve requirements.....	777	777	777	777	777
Of the above keep 6/18 in own vaults.....	\$254,349	\$252,594	\$234,224	\$248,305	\$209,410
And 7/18 with Federal reserve bank.....	84,783	84,198	78,075	82,368	69,804
And the balance 5/18 with Federal bank or in vault.....	96,914	98,231	91,087	95,980	81,437
	\$70,652	\$70,165	\$65,062	\$68,557	\$58,169
Payments to Federal bank:					
1. Reserve above 7/18.....	\$98,914	\$98,231	\$91,087	\$95,980	\$81,437
2. Subscription to stock.....	10,425	10,425	10,425	10,425	10,425
3. United States deposits.....	11,944	11,944	11,944	11,944	11,944
4. Withdrawals of reserve city and country banks.....	116,734	126,488	228,540	158,555	366,399
Total cash payments to Federal bank.....	\$238,017	\$247,088	\$341,996	\$277,004	\$470,205
Present cash holdings (specie and legal tenders).....	\$376,896	\$376,896	\$376,896	\$376,896	\$376,896
Less new reserve required in own vaults 6/18.....	84,783	84,198	78,075	82,368	69,804
Balance.....	\$292,103	\$292,698	\$298,811	\$294,518	\$307,093
Less Federal bank payments (above).....	238,017	247,088	341,996	277,004	470,205
Balance.....	\$54,086	\$45,600	\$56,815	\$17,514	\$36,888
Less 5/18 reserve either in vaults or with Federal reserve bank.....	70,652	70,165	65,062	68,557	58,169
Deficit.....	\$16,566	\$24,565	\$108,247	\$50,943	\$231,293

Notes: In \$000 omitted

the central reserve city institutions would have to rediscount slightly less than \$17,000,000. Where the country banks withdraw one-half of their contributions to the reserve banks equally from the reserve city and central reserve city institutions, while the reserve city banks finance themselves as far as possible from their own cash, the necessary rediscounts would amount to something less than \$25,000,000. If the country banks should withdraw their entire contributions from their reserve city and central reserve city agents, in equal proportions, while the reserve city institutions finance their own contributions and the withdrawals of the country banks as far as possible from their excess cash holdings over the required reserve, the central reserve city banks will be forced to rediscount something over \$108,000,000 of paper. Under the fourth assumption, where country banks and the reserve city banks as a class each supply from their cash holdings one-half of their payments to reserve banks withdrawing the balance, in the case of country banks, one-half from the reserve banks and one-half from the central reserve city banks, respectively, while in the case of the reserve city banks the entire withdrawal, namely, one-half of their contribution, of necessity being from their central reserve agents, the central reserve city institutions will be forced to rediscount \$51,000,000. Under the fifth assumption, where the country banks and the reserve city banks, each as a class, insist on maintaining their present cash holdings, the country banks drawing their payments in equal proportions from the reserve and central reserve agents respectively, while the reserve city banks withdraw their entire contributions from the central reserve city banks up to the amount of their reserve balance, if necessary, the rediscounts required of the central reserve city institutions would amount to over \$221,000,000.

The Problem of Rediscounting to Create Balances with Reserve Banks.—How do these necessary rediscounts compare with the reserve with the Federal reserve banks, which under the law can be created by rediscounts, amount-

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ing to one-half of the total payments for this purpose to these institutions? Again we presume that throughout this calculation the central reserve city institutions would prefer to carry the optional reserve, amounting to five-eighteenths of the total, with the Federal reserve bank rather than in their own vaults, because by so doing they could make up one-half of it through rediscounting—thus reducing the cash which must be supplied by this amount, for if they kept it in their own vaults they would be required to provide cash for the entire amount. Under the first assumption, the payment to the Federal reserve bank, including the required seven-eighteenths and the optional five-eighteenths of the total reserve, would aggregate \$169,566,000. Of this, presuming the Federal reserve banks were willing, \$84,783,000 could be created by rediscounts. In this case, however, the rediscounts necessary would be only \$16,566,000. In the second assumption the aggregate payments, required and optional, to the Federal reserve bank would total \$168,396,000, of which, with the consent of the reserve banks, \$84,198,000 could be created by rediscounts. Against this the required rediscounts would amount to \$24,565,000. In the case of the third assumption the payments, required and optional, to the Federal reserve banks aggregate \$156,149,000, of which \$78,074,000 can, with the consent of the reserve banks, be created by rediscounts. In this case, however, the central reserve city institutions would have to rediscount \$108,247,000 of paper, leaving a deficit, if such it might be termed, of \$30,172,000 to be handled. Under the fourth assumption, the payments, required and optional, to the Federal reserve banks total \$164,537,000, of which \$82,268,000 can be created, with the consent of the reserve banks, through rediscounts. Against this the necessary rediscounts aggregate only \$50,943,000. Under the worst assumption, the fifth, the payments from the standpoint of the central reserve institutions to the Federal reserve banks, required and optional, amount to \$139,606,000, of which \$69,803,000 could, with the consent of the reserve banks, be created by rediscounts. However, the central

reserve city institutions would have a deficit of \$221,292,000, or \$151,489,000 more than they could meet through rediscounting one-half of their total payments to the Federal reserve banks.

Summing up, we see that only under the third and fifth assumptions will any extraordinary methods be required to enable the central reserve city institutions to meet the withdrawals of country and reserve city banks, presuming the Federal reserve banks will allow the central reserve city banks to build up one-half of their reserve with them through rediscounting. Under assumption three, the deficit over and above the permissible rediscount of one-half of the reserve payments to the Federal reserve banks would amount to something over \$30,000,000, while under the worst assumption it would exceed \$151,000,000. Presuming that either assumption might coincide with later developments, how can these deficits be financed?

Courses of Action Open to Banks in Raising Funds.—

Generally speaking, three courses of action are open to the central reserve city institutions. In the first place, if the Federal reserve banks are willing, these institutions can rediscount this deficiency nominally without reference to building up their reserve requirements, aggregating, under the worst conditions, something over \$151,000,000 above the permissible limit. This would not require the central reserve city banks to turn away any borrowers who had become accustomed to rely upon them for accommodation. As a second alternative, the central reserve city banks could borrow, either abroad or from national and State banks throughout the country, against collateral, or by the sale of securities which they own, finance the deficit, aggregating under the worst assumption \$151,000,000, and thus avoid the necessity of curtailing their operations. The third alternative is for the central reserve city banks to reduce their operations by the amount of the deficit. That is to say, they can require the payment of call loans and can collect maturing commercial paper, which they have bought from note

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brokers, to a sufficient extent to put them in funds to meet these deficits, whatever they may be.

Which of these three courses will the central reserve city banks adopt? It is difficult and, in fact, unsafe to make any prophecy. The objection to the first method of large rediscounts is that it will put these banks very heavily into debt; it will require the complete reversal of banking sentiment against the practice of rediscounts, and, looked at from the national stand-point, will create a questionable situation by having some thirty-six banks indebted to the Federal reserve banks to an enormous extent. However, it may be advisable, in spite of these objections, for the central reserve city banks to adopt this course. To do so would involve the smallest disturbance of present methods of financing business, avoid any violent contraction of credit, and so long as the lending policy is intelligently handled, no serious dangers need develop for the banks themselves. If this plan were adopted, the banks could shift some of their borrowers over to other institutions as fast as conditions might make it possible, thereby reducing their borrowing from the Federal reserve banks and readjusting business conditions slowly, and with due regard to the delicacy of the situation.

The second plan under which the central reserve city banks will borrow from other national banks, from State banks, or abroad, is not likely to be followed to any extent. There is no well-developed channel through which such borrowings could be handled, and the possibility of arranging it after the Federal reserve banks have been created is still further lessened. The Federal reserve banks are the natural places to which banks will, and should turn, to borrow. Loans can be arranged with them more easily and with less danger than with any other class of banks, and hence, if borrowing is to be done, it is almost certain it will be from the Federal reserve institutions.

Probabilities of a Curtailment of Loans.—Looked at from the stand-point of prudence and conservative banking, the third alternative appears to be the most inviting. Why should the central reserve city banks plunge into debt in

order to finance borrowers when the logic of the situation indicates that these customers must sooner or later be dropped? If the central reserve city banks borrow heavily, such a course will be prompted either by a desire to avoid any serious disturbance of commercial borrowing or to hold this business as long as possible in the hope that some method may be devised by which it can be preserved.

As has been elsewhere pointed out, the central reserve city banks are heavy buyers of commercial paper from note brokers, and discount a large amount of paper of big corporations which borrow directly. There is no moral or banking obligation to continue loans where the firms whose paper is owned are not depositors. The purchase of this paper was prompted solely by the desire to invest funds at a profitable rate of interest. To refuse to buy other paper when these investment holdings mature will not deprive the bank of any of its depositors or involve any sacrifice to the institution. Whatever hardship is created will fall upon the firms which are seeking loans which the note brokers may be unable to place because one of their best markets has suddenly vanished. These business concerns are scattered throughout the country—a great majority of them not being located in New York, Chicago and St. Louis—and the disturbance in business conditions will not affect these cities any more than it will any other section. Central reserve city banks can, therefore, well say that the burden of carrying these business firms should be assumed by the entire country and not be one which they alone must handle.

Who will be Affected by a Reduction in Loans?—According to the compilation made by Mr. Alexander Gilbert, set forth in detail in the preceding chapter, the loans made by the New York City institutions, disregarding Chicago and St. Louis, to borrowers situated outside of that city, aggregate over \$962,000,000. It is safe to presume that the loans similarly made in Chicago and St. Louis would raise the total to \$1,200,000,000. The deficit to be met is less than twenty-five per cent of this amount.

Again, the New York City national banks had loans,

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according to Mr. Gilbert, amounting to about \$265,000,000 to Wall Street brokers, while the country banks had outstanding \$175,000,000 of direct loans, which were made by the New York City banks as their agents. It is very probable, particularly in the absence of abnormal interest rates for call loans, that the country banks would withdraw a large proportion of these Wall Street loans in financing the readjustment of their reserve requirements. If they should do so it would naturally not affect the amount of withdrawals from the central reserve city banks for the latter would be forced, to a large extent, to take over these loans just as they have been compelled to do in the past. It can be readily seen that the \$440,000,000 of stock exchange loans furnishes another possible source from which the central reserve city institutions can make up whatever deficit they must handle.

Will the Stock Market Have to Bear the Burden?—Which course will they prefer to adopt? Will the national banks of the country, irrespective of class, force this contraction in loans upon the stock exchange? The popular verdict will be emphatically in favor of such a course, and good banking would dictate that so far as possible, and without serious unsettlement of stock exchange values, this policy should be adopted. To contract the discounts of commercial paper will profoundly unsettle business, and should be resorted to only as the last expedient. It is clear that under the worst assumption, the New York institutions will be able, by one or the other of these methods or by a combination of them, to handle any withdrawals which are likely to occur.

No Inherent Defect in Readjustment Provisions.—It is clear that up to the end of the thirtieth month the Federal Reserve Act's provisions concerning the readjustment of reserves are inherently sound under ordinary business conditions. In the absence of any disturbance, such as a panic, a war involving the United States, or a great national catastrophe, there is no reason why the readjustment of reserves can not be successfully accomplished, and

without any serious disturbance to business. Our examination of the amount of rediscounting which must be done by central reserve city banks has been based upon the worst assumptions. As a matter of fact, the probable extent of rediscounting is not likely to be nearly as great as would be indicated by the fifth assumption. It is interesting to speculate, although no one can really tell, which one of the above assumptions will most likely accord with future developments. The range between the first and fifth assumptions will cover, it is believed, every possible contingency, but as to which of the intervening cases will prove to be the most accurate, we can only infer.

It is obvious that the question is largely determined by the course which the reserve city and country banks will take with reference to the cash holdings they must keep over and above the minimum vault reserve required. The only light which we can get upon the probable course of action concerns conditions at the present time. According to the compilation of the Comptroller of the Currency as of October 21, 1913, the country banks were holding \$294,180,000 of cash, while the minimum cash reserve required was \$222,959,000. Their excess cash holding, therefore, was \$72,221,000, a sum equivalent to 1.9 per cent of their deposits subject to reserve requirements. In other words, the country banks were holding not a six per cent vault reserve, which was the minimum specified in the National Bank Act, but a 7.9 per cent vault reserve. In our investigation of the probable readjustment of reserves of reserve city banks, we noted that on October 21, 1913, these institutions were carrying between \$10,000,000 and \$11,000,000 of cash in their vaults over and above the legal minimum which they were required to so hold.

What is the Most Likely Estimate of the Extent of Withdrawals?—Will the country banks and the reserve city banks feel that they must have the same margin in dollars in their vaults over and above the new reserve, which they have felt was necessary under old conditions? There are many reasons why this assumption may not accord with the

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facts, but let us presume, for the sake of argument, that this view will be adopted by the country banks and the reserve city institutions. The second assumption is predicated upon the supposition that country banks will withdraw something over \$63,000,000 from the reserve city and central reserve city banks during the first year, not because they need this money to make payment to the Federal reserve banks, for they can do that, practically speaking, from their own vaults, but because they desire to have surplus cash approximating this amount in their vaults after these payments have been made. During the third year the third assumption presumes that the country banks will withdraw about \$60,000,000 more than they must withdraw for the purpose of making payments. As far as the country banks are concerned, therefore, the second assumption during the first year and the third assumption during the third year would accord very closely with the present policy, as regards surplus vault reserves, now pursued by the country banks. As far as the reserve city institutions are concerned, the withdrawals during the first year under the second assumption are less by about \$9,000,000 than would be the case should they desire to keep surplus cash holdings of \$10,000,000 over and above their minimum vault reserve. During the third year the estimated withdrawals by the reserve city banks under the second assumption are between \$10,000,000 and \$11,000,000 less than would be the case should they desire to keep their same actual cash holdings. Under the third assumption, which we have seen may accord most nearly with the policy to be pursued by the country banks, the reserve city institutions are presumed to withdraw between \$10,000,000 and \$11,000,000 less than would be the case if they should desire to keep the same actual amount of cash on hand, over and above the minimum requirements which they now hold.

Therefore, to sum up, the second assumption may be said to roughly indicate conditions during the first year, while the third assumption almost coincides with what will occur during the third year. If we turn to our calculations con-

cerning the central reserve city banks, we will find that under the second assumption in the first year, the central reserve city institutions would have a cash surplus, after making payments, of \$53,000,000, a sum sufficient to enable them to finance the requirements which would be placed upon them. Under the third assumption in the third year, the required rediscounts amount to \$108,000,000, and if we add \$10,000,000 additional withdrawals by the reserve city banks over and above the minimum specified under this assumption to give them surplus till money, the necessary rediscounts would be raised to approximately \$118,000,000. This conclusion, moreover, is based upon the presumption that the United States deposits will be withdrawn from both the reserve city and central reserve city banks. If they are allowed to remain with the reserve city banks they would cut down the necessary withdrawals from the central reserve city banks in the third year and under the third assumption, by about \$35,000,000. Presuming that the United States deposits are allowed to remain with the central reserve city institutions and that the withdrawals of the reserve city banks have been reduced to \$35,000,000 because the United States deposits have been allowed to continue with them, the rediscounting which will be necessary for the central reserve city banks is almost cut in half, not exceeding, under this assumption, over \$61,000,000.

Again it should be repeated that this is but a prognostication. However, taking everything into consideration, the rediscounting which the central reserve city banks will be compelled to make will not probably, under any circumstances, exceed \$150,000,000. It should also be borne in mind that there is no real necessity for rediscounting by the country banks and the reserve city banks to finance the readjustment of their reserves during the first three years.

CHAPTER XXVI

THE FINAL STAGE IN THE READJUSTMENT OF RESERVES

Six Steps in Shifting Reserves.—In shifting reserve funds from present reserve agents to the Federal reserve banks six steps are taken. An analysis of the process will disclose the fact that the strain imposed by each stage is not equally severe. Some involve a great amount of preparation and have a more far-reaching effect, when completed, than the others. Three steps stand out clearly as the most important, the others representing intermediate variations.

Three Steps Stand Out as the Hard Problems.—The first step, taken when the Federal reserve banks are organized, involves the sudden shifting of a large amount of money to the reserve banks. The coincident reduction in both vault reserves and in the total reserve, as we have seen, greatly aids in the solution of the problem. The second point of great stress will be reached at the beginning of the twenty-fifth month after the establishment of the reserve banks. At that time the obligatory payments on account of reserves will reach their maximum. Upon the principle of the last straw breaking the camel's back, it is apparent that the successive payments to the reserve banks will involve a continually increasing strain on the member institutions, and that if this point of maximum compulsory contributions can be safely passed a great victory will have been won.

In preceding chapters we have reviewed at length these two periods of stress. We have seen that the first can be managed with little difficulty, and that through the power of rediscounts the present reserve institutions can meet all probable demands in the second period. There remains for consideration the third and final period, occurring at the end of the thirty-sixth month after the establishment of the reserve banks. At this time the Act requires the shifting of the optional balances, which theretofore might have been carried with member bank reserve agents, into the banks'

vaults or to the reserve banks. We have heretofore presumed that the entire optional balance will be carried with member bank reserve agents.

It has seemed best to leave the study of this final readjustment for separate treatment, (1) because by this time the reserve banks will have such large resources and should be so well established that conditions will be very much better than during the earlier stages; (2) because as a result of the size of the reserve banks and several years of experience, rediscounting could be much better handled than at first, and (3) because the lapse of three years will give the member banks an excellent opportunity gradually to shift their loans and to realize on their assets in preparation for the final readjustments.

The Final Stage.—What is the amount which each class of national bank will be compelled to transfer from their old reserve agents to their own vaults or to the reserve banks at the end of the third year? A positive answer to this question is very difficult to formulate. We can tell with considerable accuracy what may happen during the first year, and we may approximate with much less definiteness what will occur at the beginning of the twenty-fifth month. When we come to the end of the thirty-sixth month we can give nothing but a general approximation, based upon our conclusions in the preceding calculations, and using the data as of October 21, 1913. So many things can happen in three years and conditions may so radically change, that even though we were sure of the exact policy to be followed by each class of banks, no absolute conclusions can be formed. The estimates given in this chapter are to be taken as suggestive illustrations of how the problem may be worked out. They do not pretend to be an authoritative finding of exactly what will occur.

We will remember that our previous study indicated that, at the end of the thirtieth month, the country banks would probably have balances with present reserve agents ranging somewhere between \$316,122,000 and \$424,687,000, while at that time they could count \$60,210,000 of these balances as their optional reserve. In all probability these

country banks, when the final stage is reached, will transfer the optional proportion, amounting to some \$60,000,000, to the reserve banks rather than to their own vaults. If the former course is pursued the balance will earn interest, if the reserve banks should decide to pay interest on deposits. If no interest is paid this course is nevertheless the wisest, for cash in the vault earns nothing and contributes no direct advantages, while a deposit with the reserve bank gives the member bank a better standing with the reserve bank, greater consideration when it desires rediscounts, and better facilities for selling drafts or handling foreign exchange operations.

Optional Reserve will Probably be Transferred to Reserve Banks.—It would therefore appear practically certain that the country banks will transfer the \$60,000,000 optional reserve to the Federal reserve banks. This must be accomplished by drawing on the reserve city and central reserve city institutions for this amount. We shall assume as before that each class of institution furnishes one-half of this sum. When the readjustment of reserves had been completed the country banks would still have balances with former reserve agents of from \$256,000,000 to \$364,000,000, no part of which could be included in their reserve calculation. Whether these huge balances will remain with the former reserve agents after this time must be left for later consideration.

At the end of the thirtieth month the reserve city banks had on deposit with their reserve agents, according to our previous assumptions, a balance ranging from \$53,000,000 to \$153,000,000. Against this they were counting some \$53,000,000 as their optional reserve on deposit with member bank reserve agents. With further withdrawals of say \$30,000,000 by country banks at the end of the thirty-sixth month, and with the necessity of shifting some \$53,000,000 additional on their own account to the Federal reserve banks, it is evident that they will make large withdrawals from the central reserve city banks. Their balances with these institutions can no longer be counted as a part of their reserve, and with this change the two per cent interest paid

thereon will cease to prove very attractive. There is no reason why the reserve city banks should rediscount at say three, four or five per cent in order to provide the necessary funds when they have this surplus earning much less than the rediscount rate. If the clearing and collection service of the reserve banks is ever to prove satisfactory, and a substitute for the methods now employed, it should certainly do so by the end of the third year. It is unlikely that at this time the reserve city banks would have to preserve considerable balances with present reserve agents, merely for the purpose of selling exchange and handling collections.

Burden of Furnishing Final Payments will Fall on Central Reserve Cities.—In view of these factors the conclusion would appear to be inevitable that the burden of furnishing the funds for the final adjustment would be directly or indirectly forced back upon the central reserve city banks by both the reserve city and the country banks. If this should prove to be the case, the balances of the reserve city banks with reserve agents, after the final step had been taken, would range roughly from nothing to some seventy odd million dollars.

Probable Withdrawals from Central Reserve Cities.—It would be entirely possible to make a theoretical calculation, following the same methods pursued in our previous calculations, to ascertain in detail the exact effect and extent of these withdrawals upon each class of institution. We have, however, at this point proceeded so far from the solid foundation of conditions as of to-day, and would be compelled to make so many arbitrary assumptions that the calculation, aside from exhibiting a method, which has already been done, would have no great practical value. For this reason we will content ourselves with general approximations.

Roughly speaking, the final stage in the readjustment of reserves will involve the following withdrawals from the central reserve city banks, presuming that the country banks and reserve city banks do not make any part of their final payments from their own vaults, which would be very unlikely:

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1. Withdrawals of country banks direct from central reserve city banks, representing one-half of their final payment, say,	\$30,000,000
2. Withdrawals of reserve city banks as follows: (a) a sum representing their payments to country banks, or one-half of the final payments of those institutions, less the fifteen per cent reserve carried against this deposit, which presumably will be included as a part of the withdrawal, say,	\$25,500,000
(b) the entire amount of payments of the reserve city banks, transferring their optional reserve, say, ..	53,000,000
	<hr/>
	78,500,000
Total	\$108,500,000

Assuming that the credit balances of the reserve city banks with the central reserve city banks were only \$53,000,000 at the end of the thirtieth month, which was the minimum amount according to our preceding investigation, the total withdrawals from the central reserve city banks would amount to \$83,000,000. As a basis for illustration we may assume, therefore, that the central reserve city banks will be called upon in refund to their correspondents between \$83,000,000 and \$108,500,000.

Lowering Vault Reserves at End of Three Years will Have Little Effect.—At the end of the third year the vault reserve of the country banks is reduced from five-twelfths to four-twelfths of their total reserve, while the vault reserve of the reserve city banks is reduced from six-fifteenths to five-fifteenths of their total reserve. In both cases, however, the total reserve remains the same. It is improbable that the banks will run their vault reserves down at this time to any extent, because to pay it to the Federal reserve bank will not help them to meet the final adjustment. If they did so they could not thereby reduce the amount of their final withdrawals from their depositaries. It would, figuratively speaking, merely be shifting money from one pocket to another.

However, the withdrawals from the central reserve city

banks may be less than the amounts above indicated. We must remember that the growth of this nation in three years is tremendous, and by that time the increase in the resources of the country banks and of the reserve city banks may have been so great as materially to reduce these calls.

On the other hand, the withdrawals from New York may possibly be much larger than is indicated by the above figures. We must recollect that with the expiration of the thirty-sixth month after the establishment of the reserve banks, the balances now carried with the present reserve agents can not be counted as a part of the cash reserves of the member banks. These balances may be left with these banks and continue to receive the two per cent interest heretofore paid upon them, or they may be withdrawn and put to work at home. One of the most serious problems which New York City and the other large cities will have to face is that of endeavoring to hold this country money. If the country banks withdraw the remaining surplus balances, amounting to an enormous total, which remain after the readjustment of reserves has been finally completed, the situation confronting the New York banks will be very difficult to handle.

Grave Problem before Big City Bankers.—The problem presented to the big city bankers will be of the gravest character. There is a possibility that the New York City banks, in order to take care of their borrowers to whom credit can no longer be extended, because of the decrease in deposits, may induce the country banks to lend these surplus balances on commercial paper, secured or unsecured. The New York banks might offer to negotiate these loans as the agents of their correspondents, making no charge to them for the service. Thus the small banks will have the advantage of the greater experience and observation of the big city banker in selecting paper. It is possible that the New York bankers might be able to collect some compensation from the borrowers, or from the note brokers for performing this service. However, there are certain difficulties which will probably limit the extent of this practice. In the first place, the ordinary banker desires to have

the paper which he has purchased in his own portfolio. He is not satisfied to have it in the possession of another bank, and while this is not an insuperable obstacle, yet it introduces some difficulties. If the country banker can use his money to better advantage at home, he will be inclined to withdraw it from the present depositaries. If the change is gradual, shifting will not necessarily mean financial stringency.

Contraction of Loans is Probable.—In connection with our discussion of the course which will be adopted by the central reserve city banks in meeting the heavy withdrawals on or about the twenty-fifth month, some consideration was given to the question as to whether the New York banks would endeavor to carry their present volume of loans by rediscounting, in so far as they would be permitted, in order to secure the necessary funds. Our conclusion was that it was likely that the New York banks would contract their loans, both collateral and commercial paper, because they would not be permanently able, in all probability, to hold this trade. This conclusion is now reinforced to a considerable extent by the fact that still further rediscounts will be necessary in order to finance the final payments incident to the readjustment of the reserve requirements. The volume of rediscounts which the New York banks would have to negotiate, if they did not contract loans, would be so large that it is very unlikely that the Federal reserve bank of New York would be able to extend the necessary accommodations. It is also an open question whether the Federal Reserve Board would be willing to permit such a course. It is, of course, possible, as we have seen, for the banks to meet all probable withdrawals by curtailing loans and by making a reasonable amount of rediscounts. Perhaps the most vital point developed in our examination of the shifting of the reserves is the possible necessity for remaking the channels of commercial and financial borrowing. How this can best be effected we will leave for later consideration in connection with our study of the effect of the reserve system upon New York and the other central reserve cities.

CHAPTER XXVII

CLEARING CHECKS AND DRAFTS

Importance of the Problem and Present Methods.—

One of the most important problems in modern banking is that of handling the large number of checks and drafts that are deposited in the course of each day's business. These items may be grouped under four heads. First, those that are drawn on the bank receiving them. These furnish no difficulty, as they are at once charged against the customer's account. Second, those on other banks in the same town belonging to the local clearing house. Such items furnish relatively few problems, since they may be promptly presented for payment. Occasionally, when the amounts are large, they may be collected by runners or, as it is the practice in some communities, for example in Philadelphia, some of the checks may be delivered direct to the banks on which they are drawn and receipts taken for them, these receipts being cleared at the clearing house instead of the checks themselves. The third category includes checks on banks in the same city which are not members of the clearing house. These are treated in two general ways. They are either collected by sending out runners, who present them at the banks on which they are drawn, or presented at the clearing house by some bank that represents the non-member bank and clears for it.

The fourth group of items is the checks and drafts against banks in other communities, which are handled in many different ways, each bank consulting its own interests in their disposition. Frequently the bank will merely deposit them at another bank with which it has an account. Thus some trust companies deposit them with national banks which assume the burden of collection in return for the profits that accrue from the trust company's deposit with them. Another method is to deposit them with a corre-

spondent bank in another city. This, of course, throws the burden of collection upon the bank that receives the items. Still another solution is for the bank originally receiving them, or the bank with which they have been redeposited, to send them by as much directness as possible to the bank on which they are drawn. Since no bank in the United States, however large, has accounts with all other banks in the country, it is impossible always to do this with exactness. Instead they must frequently be sent to a correspondent bank located in the same general section of the country as the bank on which the checks are drawn. This latter bank then sends them to their destination, or to some other bank that is more nearly in the immediate vicinity of the drawee bank.

Disadvantage of Present Methods.—Some of the difficulties of the present methods of handling these items are obvious. Very few arise under the first two conditions described, but there are many in connection with the other two groups—especially with the fourth. The disadvantages of the methods now used are to be found (a) in the loss of time in getting the check back to the bank on which it was drawn; (b) the expense in postage, clerical hire and loss of interest while these items are in transit; and (c) the charges by the banks for the service of collection which, it is alleged, are sometimes in excess of the actual cost. An illustration given in Cannon's "Clearing Houses" makes the loss of time and expense clear. In one case, which he designates as an average one, the collection of a check required drawing two other checks, writing four letters, and expending eight cents in postage, while the original check was handled seventy-five or more times by a score of clerks in five banks in three different cities. More extreme illustrations might be found, but it is scarcely fair to present them, since they are not typical. Some idea of the way in which collections work out in practice is given by the actual experience of certain bankers in the East who have received, in the course of business, checks on a southern point, say Florida. Some of the banks on which these checks are drawn

are very tardy in remitting, and after considerable delay often send in payment exchange on New Orleans. This is, of course, not cash for the eastern bankers, who are compelled to collect the New Orleans drafts. When remittance is received from New Orleans it is usually in a form that is fairly satisfactory, but the time lost in collecting from Florida and then again from New Orleans adds very heavily to the expense.

Heavy Expense in Making Collections.—The general practice, as explained by different bankers who testified before the Senate Committee on Banking and Currency when this matter was under discussion, is of interest. Some of them declared that when they received checks on country banks in their vicinity and sent them to the country bank's correspondent for collection, those correspondents objected to having their balances charged at once with the amount and insisted that time be allowed for them to remit. When the remittance was sent it was for the face of the check less a collection charge. Thus the delay and the expense incident to the transaction was thrust upon the bank in the reserve city. In some cases the reserve city banks have compelled the country banks to meet the expense.

The cost of handling these items was investigated by a Committee on Inland Exchange for the Clearing House Committee of the New York Clearing House Association which, on November 4, 1912, submitted a report declaring that the gross income to the members of the Clearing House Association from collecting exchange during the year 1911 was \$2,139,551. Against this must be charged as exchange cost, postage, rent, stationery, salaries and loss of interest (cash) a total of \$2,042,083.78, which left a net income of \$97,467.22.

This report was rendered shortly after accusations had been made that the New York banks were charging more than they should for the collection of out-of-town items. In the hearings before the Pujo Committee that was investigating the "Money Trust," it had been charged that the New York banks received about \$50,000,000 a year from this

source, and the report of the Committee on Inland Exchange was intended as an answer. Without attempting to analyze the matter, we shall point out the way in which the banks of New York endeavor to shift the expense of collecting these checks from their own shoulders to those of their customers. The cities of the country are divided, under the rules of the New York Clearing House, into three classes. The first class constitutes those known as discretionary points. On such points each bank may exercise its own discretion as to charges, and in practice none are made. The second group consists of points a little farther distant. On these the banks bind themselves to charge a uniform rate of one-tenth of one per cent. The third class includes all other cities within the United States and items on them are charged at the rate of one-fourth of one per cent to cover the cost of collection.

In Philadelphia such a system of charges does not prevail, but instead another device is used which accomplishes much the same purpose. The large banks pay interest on the deposits of other banks. They allow interest to begin immediately only for items on a number of discretionary points and divide the rest of the country into three regions. Deposits of items on banks in the first district receive interest only after three days, with items drawn on banks in the second district interest begins after five days, while with items on banks in the rest of the country interest commences after seven days.

Collecting Out-of-town Items through Clearing Houses.—Disadvantages in these various practices have been recognized by the banks, and various methods have been introduced here and there with a view to improvement. Thus the Old National Bank of Spokane, Washington, endeavors through its advertising matter to persuade bankers of the country to send items on all points within about five hundred miles of Spokane, direct to it for collection, urging that if this practice is followed much unnecessary time and expense will be saved. More important are the methods employed by the clearing houses of Boston, Kansas City,

Atlanta and Nashville. In each of these places the banks belonging to the clearing house turn into it the checks which they receive on banks within a considerable area adjoining the city. The clearing house groups them and sends them out for collection, thus saving a large amount of time and expense. These devices, while helpful, have by no means solved the problem, and there is still much reason for charging that a great deal of waste is involved, and that in some cases the accusation of excessive collection charges is true.

Provisions of the New Law.—The Federal Reserve Act attempts to solve this problem through a number of different provisions. In Section 13 authority is given to the Federal reserve banks to receive on deposit from member banks not merely cash, but “checks and drafts upon solvent member banks, payable upon presentation;” or, solely for exchange purposes, to receive from other Federal reserve banks cash and “checks and drafts upon solvent member or other Federal reserve banks, payable upon presentation.” In Section 16 every Federal reserve bank is required to “receive on deposit at par from member banks or from Federal reserve banks checks and drafts drawn upon any of its depositors, and when remitted by a Federal reserve bank, checks and drafts drawn by any depositor in any other Federal reserve bank or member bank upon funds to the credit of said depositor in said reserve bank or member bank.” In the same section the Federal Reserve Board is authorized to fix by rule “the charges to be collected by the member banks from its patrons, whose checks are cleared through the Federal reserve bank,” and also “the charge which may be imposed for the service of clearing or collection rendered by the Federal reserve bank.” Since each reserve bank is required to receive at par, from member banks or other reserve banks, items drawn upon any of its depositors no charge can be made for collecting checks upon any of its members, no matter from what source received. A charge may be made, however, to a member bank for the collection through another Federal reserve bank, or otherwise, of all checks drawn against member banks in another

district. This charge which may be made by the reserve bank must be fixed by the Federal Reserve Board. Its amount, as well as the charge made by any member bank to its patrons who present checks for collection, will presumably not be fixed exactly but merely a maximum indicated.

Another provision affecting the entire country is also to be found in Section 16. The Federal Reserve Board may, at its discretion, exercise the functions of a clearing house for the reserve banks, or may designate one of the reserve banks to act as a clearing house for the others, and may also require each reserve bank to act as a clearing house for its member banks. Finally, in Section 19, there is found the requirement that "no member bank shall keep on deposit with any nonmember bank a sum in excess of ten per centum of its own paid-up capital and surplus," and that "no member bank shall act as the medium or agent of a nonmember bank in applying for or receiving discounts from a Federal reserve bank under the provisions of this Act, except by permission of the Federal Reserve Board."

In earlier drafts of the Act an attempt was made to require the collection at par of the checks of all member banks in all parts of the country. Much objection was raised to this proposal by the country banks, who declared that many of them would thereby lose a large source of income. It was maintained that many of these institutions received much of their income in this way, and if any provisions were made that would deprive them of this revenue, it would antagonize them and prevent them from entering the system. No matter what the reason, the bill as finally passed does not compel the receipt of all checks by the Federal reserve banks, at par, but merely those upon its own member banks and upon the members of another reserve bank, if remitted by the reserve bank of that district. With the provision in this modified form, the intent appears to be that each reserve bank shall become the clearing house for its district.

Will Present Clearing Houses Be Abolished?—How fully this will be realized is uncertain. Some have suggested

that each reserve bank may act as a clearing house for all member banks of the city in which it is located. Each bank would merely deposit its items on all member banks within the city, the reserve bank being required to receive them "on deposit at par." If this should occur the expense of maintaining a clearing house will be placed on the reserve bank, and clearing houses in the cities where reserve banks are located (and perhaps where there are branches) would no longer be needed.

If the reserve bank does not wish to assume the burden there seems to be no alternative unless it is in the authorization in the Act specifying that the Federal Reserve Board may impose a charge "for the service of clearing or collection rendered by the Federal reserve bank." Since the checks and drafts themselves must be received "on deposit at par" the only method of making a charge would seem to be a periodical assessment on each bank, on the basis of the proportion which its clearings bear to the total. Such a charge could be made so heavy that the banks would prefer to keep their present clearing house organization, or so light that they would find it more profitable to use the reserve banks.

Heavy Expense Involved.—By such a method each reserve bank will be able to attract or repel the deposit of checks and drafts by all of its member banks. In Boston it has been found that two-thirds of the total expense of operating the clearing house is due to the cost of handling the out-of-town items and that when volumes are compared they cost thirty times as much as items on banks within the city. The checks and drafts must be taken "on deposit at par," but the expense may be charged back on each member in some indirect manner. Whether this is done will be purely a question of policy to be decided by the Federal Reserve Board. If the earnings of the reserve banks make it possible the entire burden of collection may be assumed by them in order to increase their influence and prestige. If earnings are small these charges may be too heavy.

Probabilities seem to be in favor of each reserve bank

taking such action as will send to it all possible items from its district. This seems the more likely when it is recalled that collection, so far as the reserve bank is concerned, is accomplished by at once charging each item against the account of the bank upon which it is drawn. There will be no loss of interest to the reserve bank while the amount is being collected. Deposits of drafts on the government's account will be taken at par because the government will, of course, have an account with each of the reserve banks. Checks and drafts on its own depositors must be taken at par when remitted by another reserve bank.

Collections between Districts.—Since reserve banks may keep accounts with each other for exchange purposes, it seems fair to conclude that drafts on each of them will be taken by each of the others at par. If this is so, its possible significance is tremendous. Let us suppose that a business man in District No. 1 must remit to a creditor in District No. 7. He may send a check on his local bank, but on it there may be imposed a collection charge in the other district. To avoid this he will not send a check, but will purchase from his local bank, perhaps at par, a draft on the reserve bank of his district. This draft, when received by the creditor in District No. 7, will be taken to the creditor's local bank which will take it at par, since the reserve bank of that district will probably do the same.

If the assumption we have made proves true, checks and drafts on all member banks within its district and on reserve banks everywhere within the United States will pass at par, and the arrangement will add greatly to the prestige and power of the reserve system. It will also mean a saving to business men of hundreds of thousands of dollars in collection charges every year. In any case checks and drafts on banks in a single district will doubtless be taken at par or nearly so within that district, and charges for those on banks in other districts will be made very moderate by the Federal Reserve Board. This does not mean, of course, that their collection will cost nothing, but that the cost will be assumed by the reserve banks or assessed back upon the member

banks. The work and the expense involved in such an undertaking will be enormous.

Maintenance of Present Exchange Accounts.—During the first thirty-six months, member banks may continue to keep a part of their reserves with their present reserve agents and will do so in order to secure the two per cent interest on such balances. These accounts are also needed for exchange purposes. Whether they are entirely abolished by the end of the three years will be determined by several factors. After that time they may not be counted as part of reserves but their retention will be determined by: (1) whether the out-of-town bank has any funds over and above reserve requirements which may advantageously be loaned in this way; and (2) whether the routine of rediscounting is so slow and the standard of commercial paper set by the Reserve Board so high that aid may not quickly be secured from a reserve bank by its members. If the service offered by reserve banks is not sufficiently attractive, member banks may continue to carry accounts with the institutions that now hold them.

We have not as yet considered the checks and drafts upon nonmember banks. Reserve banks may receive on deposit only cash, and checks and drafts upon member banks. Only checks and drafts upon members must be taken at par. There is no provision for items upon nonmembers, and they are thus placed at a disadvantage so serious that they may be forced to seek membership.

CHAPTER XXVIII

MORTGAGE LOANS ON FARM LANDS

Greater Privileges of State Banks.—A factor which has been largely responsible for the rapid growth in the number and resources of State banks has been the wider latitude which they have enjoyed in making loans and investments. One of the most important advantages which they possess is the power quite generally given to make loans, within certain limitations, upon real estate mortgages. The most valuable class of assets of any nation is its land, for from it, directly or indirectly, come all the wealth of the country and the sustenance of its people. With banks situated in rural districts or in the smaller towns, where the holdings of corporate securities are not apparently so great, the most common asset of value is real estate.

Limitations on Real Estate Loans by National Banks.—The National Bank Act does not, in set terms, forbid national banks loaning upon real estate mortgage. In the enumeration of the powers given to these banks, however, Congress was careful to state that such associations should have the power of "loaning money on personal security," while the Act specifically forbids a national bank to hold real property except under certain clearly defined conditions.

Section 5137 of the revised statutes dealing with this subject reads as follows:

"A national banking association may purchase, hold, and convey real estate for the following purposes, and for no others:

"First. Such as shall be necessary for its immediate accommodation in the transaction of its business.

"Second. Such as shall be mortgaged to it in good faith by way of security for debts previously contracted.

"Third. Such as shall be conveyed to it in satisfaction of debts previously contracted in the course of its dealings.

"Fourth. Such as it shall purchase at sales under judgments, decrees, or mortgages held by the association, or shall purchase to secure debts due to it.

"But no such association shall hold the possession of any real estate under mortgage, or the title and possession of any real estate purchased to secure any debts due to it, for a longer period than five years."

Under the decisions of the courts, the Act has been interpreted to prohibit a national bank from lending money on a real estate mortgage, and such mortgages as are held by the national banks have been secured, at least nominally, under the conditions recited in the above section of the Act. Many national banks have complained that this restriction places them under a severe handicap in competing for business with State institutions, and that instead of being an advantage to them it is an element of weakness.

Disadvantages of National Banks in Dealing with Farmers.—When money is loaned to a farmer, for example, it is obvious that his most valuable asset is his farm, and the discount of his note is justified in the mind of the banker, to a considerable extent, by the fact that he is the owner of this land. In the event of his failure to pay the note when due, the bank can proceed against him and recover the amount of the loan from the sale of the property.

If, however, the note is to run for a considerable period of time, the bank takes a certain amount of risk, which is largely of a personal character. If the farmer is dishonest or singularly unfortunate, or if he is induced to embark in some fake mining scheme or other unsound enterprise, he may lose sight of prudence and place a mortgage on his farm and dissipate the money arising therefrom before the note matures. The bank would then find itself the junior creditor, and would be powerless to intervene and prevent this result from occurring. It must not be inferred from this illustration that, as a general rule, banks take big risks in lending money on notes of farmers or of other owners of

real estate. There is, however, always the possibility which has been pointed out, and from a legal stand-point the bank, when dealing with an individual concerning whose good judgment there might be some doubt, could protect itself by taking a mortgage upon the man's property rather than by loaning upon an unsecured note.

Organization of State Institutions by National Bank Stockholders.—As a result of this decision, the stockholders of many national banks have felt forced to adopt a course which, from many points of view, must be regarded as an evasion of the spirit, although not of the letter, of the National Bank Act. The owners of a national bank organize a trust company, under the laws of the State in which the bank is situated, in many cases using the funds of the national bank to pay up the capital of the trust company by a declaration as a dividend of part of the surplus of the national bank. Where such trust companies have been organized, it is quite common to find that a provision is inserted in the by-laws, and often printed upon the stock of the trust company, stating, in effect, that these shares can be transferred only when and if the corresponding shares of the national bank owned by the same stockholders are also transferred. It is further provided that the same owners shall possess both the bank's and the corresponding trust company's stock. While this provision is probably illegal in most States and would not stand a test in court, yet the business motives underlying the situation are so plain and the interests of the stockholders are so obvious that there has never been any serious objection raised to this practice on the part of the stockholders.

Operation of Dual Institutions.—Where such a dual bank and trust company exist, it is quite common to find that the president of the bank is the president of the trust company, it being so stipulated in the by-laws, while the cashier of the bank acts as treasurer of the trust company, and the directors of the one institution are the same persons as the directors of the other. In many cases both occupy the same building, their quarters being divided by

a glass partition. One set of clerks keep the books and handle the business of the trust company, while another set of clerks, on the other side of the partition, keep the books and handle the business of the bank. The funds of the trust company are kept in the vaults of the bank. The meetings of the directors of the two institutions are held, practically speaking, at the same time.

In other cases, the trust company occupies a building adjoining that of the bank, with a communicating door between the two; or if deemed expedient, the two institutions are separated physically if not actually. At a glance, this arrangement would seem to be a direct evasion and open violation of the National Bank Act; and yet, where distinct corporate entity exists, where the books of the institution are kept separate and the funds of the trust company are segregated from those of the bank, with no liability attaching to the bank for the obligations of the company, except for the cash deposit held, there is really no strong reason why the national bank should be undermined or injured by the existence of this sister corporation. The arrangement involves merely the same set of owners who have contributed in like proportions to the capital of both institutions, the same directors sitting upon the boards of both institutions, and in some cases the officers occupying the same relative positions in both. This practice has been developed extensively in the South and in the West, and from these sections came a very strong demand, while the Reserve Act was under consideration in Congress, that the national banks should be given the power to make loans, under proper restrictions, upon real estate mortgages. It was argued that the granting of this power would do much to cause State institutions to take out national charters, and it was also argued that justice and good banking demanded the extension of this privilege, entirely aside from the question of national expediency.

Why the National Banks Were Denied the Right to Buy Mortgages.—In defence of the National Bank Act, it should be stated that the intention of Congress was to

provide for the incorporation of national banks, whose chief business would be the receipt of demand deposits and the investment of such funds in a manner which would accord with the principles of sound commercial banking. The prohibition against the purchase of real estate, or of loans upon real estate security, was based upon the theory that real estate is a slow asset, and for a commercial bank whose deposits are subject to repayment upon demand such an asset is unsuited, either as an investment or as security for a loan. The law, therefore, restrained national banks from entering this field.

Time Deposits and the Lending Problem.—It transpires, however, as we have seen, that a large proportion of the deposits of national banks are time deposits existing either in the form of savings accounts or in the form of time certificates of deposit. Experience has demonstrated that these deposits are reasonably stable, and that it is not necessary to invest all of the time deposits in quick assets. The national banks hold also an enormous amount of investment securities, particularly the bonds of municipalities, railroads and public service corporations. These securities in normal times can be marketed, if well selected, with some dispatch and with little or no loss, and they meet admirably the requirements for a proper investment of the more stable deposits of banking institutions.

In agricultural communities, the investment of large sums of money in the securities of corporations whose properties are situated hundreds of miles distant, is regarded by many as a distinct disadvantage. The argument is advanced that the neighborhood suffers a distinct loss through the departure of its capital to other communities, and that if the money were kept at home it would increase the value of every man's farm, the productivity of the district and the thrift and wealth of its citizens. This argument is one which appeals powerfully and is, to a very considerable degree, founded upon solid fact. A large proportion of good farm mortgages in the agricultural districts are created for the purpose of financing improvements to the farm

which, if wisely made, will increase its productivity and revenue producing power. A farmer who desires to buy an extensive outfit of machinery, such as tractor plows, or who wants to underdrain a part of his land or to plant out a section of it in an orchard, or who wishes to build larger barns for the purpose of housing cattle or to make some other outlay for some similar purpose, can not expect to pay for these improvements out of the profits of a single year. In fact, it will take him, under the best conditions, from three to five years to accumulate a surplus sufficient to extinguish the debt or to have a sufficient fund on hand to insure the renewing of the balance of the mortgage. Such loans, when intelligently made, are absolutely good. As a matter of record, the losses are very small; and, therefore, the security afforded by such collateral is as good as any which a bank can purchase.

Financing the Farmer.—In contradistinction to this borrowing on mortgages for the purpose of making improvements, farmers borrow to a considerable extent on four-months, six-months or one-year notes, for the purpose of financing their temporary needs. At the end of the growing season the farmer can borrow money on six-months paper, for example, to secure funds to purchase steers, to which he will feed the corn which he has grown during the summer, selling the cattle in the spring, or whenever market conditions seem most advantageous. This paper, when the loans are carefully made, is exceedingly good. As soon as the steers are shipped to the market and sold, the borrowed money is returned to the bank that advanced it, and thus the loan is automatically liquidated in the process of the transaction.

To meet the banking needs of an agricultural community, therefore, it is contended that national banks should be enabled to conduct both kinds of business, and make part of its loans on mortgages and part on commercial paper. In support of the contention that lending money on mortgages does not mean any unusual risk or hardship on banking institutions, the advocates of this plan cite the

experience of State banks when permitted to make such loans. The laws of many of the States permit them to loan a considerable proportion of their funds upon mortgages. For example, in Michigan the law allows the State bank to invest fifty-one per cent of its savings deposits in mortgages, obligates the institution to hold fifteen per cent of these deposits in the form of cash reserves, and allows the directors to loan the remaining thirty-four per cent as they see fit, within general limitations. In Massachusetts seventy per cent of the savings deposits may be invested in mortgage loans.

Experience of State Banks with Mortgage Lending.—Many trust companies, all of which are organized under State charters, have been successful in handling real estate loans. The institution which has gone farthest in this direction of any trust company in this country is probably the Mercantile Trust Company of St. Louis, of which Mr. Festus J. Wade is president. This institution has developed a very large business in placing mortgages upon improved real estate of every desirable sort, including office buildings and other central business property, apartment houses, etc., the mortgage being made out to the Trust Company as trustee. Under these mortgages, and secured thereby, the Mercantile Trust Company issues bonds in denominations of suitable amount and sells them to investors. These bonds pay from five to six per cent, and have proved very attractive to the people of that district. There is no doubt that the granting of the right to reserve city banks (in addition to granting the privilege to country banks) to make farm loans, which is given in the Federal Reserve Act, is prompted by the very strong testimony on this subject given by Mr. Wade before the Congressional committees. Although his institution is located in a central reserve city, and therefore the example of his work was not the moving consideration, yet, as he forcibly pointed out, the banks in the reserve cities are to a large degree the central institutions for the surrounding country districts. Being in touch with the city investor, and being also the natural and logical center for the surrounding country,

they are in a most excellent position to develop a good business in farm loans.

Bankers' Position on Mortgage Lending.—Western banks were almost unanimous in advocating that national banks be given the privilege of making farm loans. They based their advocacy upon the almost uniformly desirable experience which State banks have met with in handling this type of security. Most of them combated strongly the idea that the farm mortgage, if carefully selected, was an inconvertible security. Several instances were cited where banks in the Middle West have succeeded in getting through panicky times, such as the fall of 1893, largely by inducing depositors who had become frightened and who desired to get their money out of the banks to accept real estate mortgages upon nearby farms, which were held by the banks. The frightened depositors were glad to take such mortgages, because they felt confidence in them, and because the purchase overcame the disadvantage of a loss of interest.

Provisions of Reserve Act concerning Mortgage Loans.—It was admitted by practically every banker who advocated the extension to national banks of the privilege of making farm loans that this privilege should be given only to a limited extent; and that the limitation should be based not upon the size of the bank, but either upon a certain proportion of its capital and surplus or else with reference to some fixed percentage of its time deposits. In order to make the practice good banking it would be necessary, moreover, to legalize time deposits and to make it possible, through the building up of public sentiment, for a bank to insist on the notice incident to a time deposit, and thus enable it to make a relatively fixed investment of such funds. As a result of the strong representations of western and southern bankers, the following provision was incorporated in the Federal Reserve Act:

“Any national banking association not situated in a central reserve city may make loans secured by improved and unencumbered farm land situated within its Federal reserve district, but no such loan shall be made for a longer time than five years, nor for an amount exceeding fifty per

centum of the actual value of the property offered as security. Any such bank may make such loans in an aggregate sum equal to twenty-five per centum of its capital and surplus or to one-third of its time deposits, and such banks may continue hereafter as heretofore to receive time deposits and to pay interest on the same.

"The Federal Reserve Board shall have power from time to time to add to the list of cities in which national banks shall not be permitted to make loans secured upon real estate in the manner described in this section."

Analysis of the Provisions of the Act.—Summarizing the provisions of the Act, we find in the first place that every national bank which is not situated in a central reserve city—that is to say, in New York, Chicago or St. Louis—or such additional prohibited cities as the Federal Reserve Board may add from time to time, is permitted to make farm loans. Such loans shall be confined to "improved and unencumbered farm land," thereby excluding timber land, undeveloped mineral land, city real estate, and many other classes of property concerning which application might be made. It must be further noted that the land must be situated in the same Federal reserve district as the lending bank, that the loan shall not exceed one-half of the actual value of the property offered as security, and shall be a first mortgage upon the property. The aggregate amount of loans which a national bank may make on such farm land shall not exceed, in the aggregate, one-fourth of its capital and surplus or one-third of its time deposits. Attention is directed to the fact that the Act specifically confirms the right of the national bank to receive time deposits.

Can National Banks Deal in Mortgages?—The wording of the Act is, unfortunately, not clear upon a very important matter, although, by inference, the common-sense meaning might readily be read into the statute. It is probable that the national banks may, in time, build up a considerable business in loaning money upon farm mortgages and then resell the mortgages to its depositors or to other investors. In such a case, the bank's profit would be largely

that of a dealer in mortgages. Such a business would be advantageous to the bank because it would draw to it a larger clientele; to the investor, a mortgage purchased from a bank would appear to have been more carefully selected than one picked up from the ordinary real estate agent.

The law does not state that the bank shall not own, at any one time, real estate mortgages up to a certain limit; but states, rather, that the bank shall make such loans only up to an aggregate sum. If a bank should take five-year mortgages, such as are authorized, and resell them within two or three months, it can be readily seen that it would be possible, with a relatively small amount of money tied up in this class of investment at any one time, to do a very large business in a five-year period. If the statute is interpreted to mean that the bank's ability to make such loans is limited, not by the amount which it owns, but rather by the amount which it has placed, there will be a vast difference in the effectiveness of this provision in financing the farmer. However, inasmuch as the bank in selling the mortgage would have no legal obligation to see that it was paid, there is no very apparent reason why a national bank should not be allowed to deal in real estate mortgages, provided it does not have more than a certain amount of its own funds invested in them at any one time.

This is the preferable interpretation to put upon this clause of the Act. It is interesting to speculate upon the effect which this provision will have upon the farm security market. It is evident, of course, that the more buyers that are created, and the greater the potential avenues of disposal for mortgages, the more convertible become such securities. Any one who has investigated the mortgage market, particularly in the well settled sections of the West, realizes how active is the demand for choice mortgages. This has been especially true in the last few years, for the more progressive life insurance companies have been very wisely putting a large proportion of their money in real estate mortgages rather than in bonds. The real estate mortgage, because it has a short maturity, will not depreciate in value with changes in the general level of

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interest rates, which necessitate a writing off of a considerable part of the investment. This, unfortunately, has been the case in the last few years with low yield railroad bonds and other securities. A higher rate of interest can be secured on real estate mortgages with equal safety, and thus the returns to the policy holders upon their savings are enhanced. If the national banks enter the market as prospective buyers, the farm mortgage should become an even more convertible form of collateral.

Banking Limitations on Mortgage Investments.—The investment of money in farm mortgages carries with it certain limitations which must be recognized. In the first place, a farm mortgage can not be rediscounted at a Federal reserve bank or used there as collateral for a loan. This provision is a very proper one; for to allow the member banks to use, without restriction, farm mortgages as collateral for loans would mean, in substance, that it would be possible thereby to expand the currency of the country almost indefinitely, the limit being fixed by the amount of farm mortgages outstanding. This practice, if indulged in even to a limited extent, would lead to inflation, and would totally destroy the objects sought after by the Act. The theory of note issue is, as we have seen, that these notes shall be issued to finance actual commercial transactions, and that when these transactions are closed and settlement made, the notes issued shall be retired and thus any redundancy prevented. This would be impossible were the Federal reserve banks permitted to issue notes upon farm mortgages or any other form of collateral security.

Reserve Act not a Complete Solution of Agricultural Banking Problem.—It must also be remembered that the provision allowing the national banks to purchase farm mortgages is not intended as a complete solution of the problem of financing the farmer. President Wilson has announced, as part of his programme, the passage of a law providing for the establishment of agricultural credit banks in this country, similar to those which exist in Europe, which will go much further than could the national banks in solving this problem.

CHAPTER XXIX

HOW THE SYSTEM WILL AFFECT THE COUNTRY BANKS

Difficulty of Accurate Estimates.—From one end of the country to the other is arising the inquiry, "How will the new system affect the country banks?" Almost every newspaper contains the opinion of some banker or student of financial affairs. With the short space of time given to directorates and officials of the national banks to decide whether they will join the system, becoming member banks, or take the first steps looking toward their dissolution as national institutions, the matter is one of vital moment. Any answer to the question will be largely a prophecy, and must, to a considerable extent, be predicated upon assumptions which, in themselves, are matters of opinion. Every feature of the bill has a direct or indirect bearing upon the answer to this question, and it is obviously impossible at this point, even though desirable, to make an adequate summary of what has been said in preceding chapters bearing upon this particular class of institution.

Prophecies that Country Banks' Profits Will Be Cut.—At the present time the most important consideration in the mind of the average banker is that of profits under existing conditions compared with those which will prevail under the new Act. The more remote and less direct considerations—the advantages which may accrue in the course of years—do not weigh as heavily as does the question of how it will affect his earnings and dividends at the beginning. While the Federal Reserve Act was under consideration in Congress, much was heard of its unfavorable nature from the stand-point of the country banker; and a large number of witnesses appearing before the committee took a very decided stand against the law, because of the effect it would have upon the profits of the country institutions. The Sen-

ate Committee on Banking and Currency, in order to secure something tangible as to the effect of the law upon the profits of the various classes of banks, requested the Comptroller of the Currency to make a computation "relating to the probable gain or loss in the earning power of banks, as indicated, under the proposed currency bill compared with the existing law." In response to this request, the Acting Comptroller of the Currency instructed the government actuary to prepare a computation which was submitted to the Committee on October 25, 1913. Subsequent to that date, numerous changes were made in the Federal Reserve Act which would materially affect this computation, which is to be found on page 3130 *et seq.* of the Third Volume of the Senate Hearings.

Method of Computing Relative Profits.—Following the principle devised by the government actuary, except where subsequent modifications of the law make changes necessary, the profits of the country banks under the old system and under the Federal Reserve Act, after three years from the date on which it is actually put into operation, would compare as shown on page 345.

In working out this computation, an effort has been made to make it as nearly typical as possible of the conditions actually prevailing. To this end, average conditions have been taken wherever possible; that is to say, the total demand deposits of the country banks in the continental United States have been divided by the number of these banks within this territory, in order to give us the average demand deposits. The same has been done with time deposits, national bank notes outstanding, and bonds deposited with the United States to secure circulation or for other purposes. The reserves have been calculated on the minimum allowed by the National Bank Act and under the new law, while the capital stock subscription has been taken on the basis of three per cent of the capital and surplus of the average bank, as ascertained in the same manner.

Compilation of Relative Profits for the Average Bank.
—Basing our calculation on these assumptions, we find that

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	Under the old system.	After three years.
Demand deposits.....	\$350,000	\$350,000
Time deposits.....	168,000	168,000
Reserve in own vaults.....	31,080	16,800
Reserve with reserve agents.....	46,620	.....
Reserve with Federal reserve banks.....	.....	33,600
National bank notes outstanding.....	68,000	68,000
United States deposits.....	5,200	.....
Bonds deposited with the United States....	72,800	66,000
Capital stock of Federal reserve bank (3 per cent).....	.....	4,150
	Decrease.	Increase.
Upon loanable funds:		
Decrease in reserves (less 5 per cent redemption fund).....	.....	\$23,900
Retirement of circulation.....	\$2,000	.....
Withdrawal of United States deposits..	5,200	.....
Sale of bonds.....	.....	6,800
Purchase of stock Federal reserve bank	4,150	.....
Total.....	\$11,350	\$30,700
Net increase .....	.....	\$19,350
Upon income:		
Loss of profit on circulation about 1.2 per cent.....	\$24.00	.....
Profit on balance with Federal reserve bank about 3 per cent.....	.....	\$1,008
Loss on deposits with reserve agents about 3 per cent	932.40	.....
Dividends on stock of Federal reserve bank 6 per cent.....	.....	249
Profit on additional funds available for lending about 4 per cent.....	.....	774
Total.....	\$956.40	\$2,031
Net gain in income.....	.....	\$1,074.60

the amount of money represented by the aggregate of the several items before mentioned is reduced from \$741,700 to \$704,550. The larger part of this reduction results from the decrease in the required reserve from the old figure of \$77,700 to the new level of \$50,400. In calculating the decrease in the reserve requirements account has been taken of the fact that the five per cent redemption fund can no

longer be included as part of the bank's reserve. The method followed has been to take the net decrease in reserve as between the conditions under the National Bank Act and under the new Act, three years after the establishment of the new reserve system, subtracting therefrom the amount of the five per cent redemption fund. This has the effect of setting off the five per cent fund, just as though it had been included as an increased item of investment upon which no income would be derived.

Turning to the effect of the changes in the several items of deposits, investments and reserve requirements upon the decrease or increase in the amount of loanable funds, we find that there is a net decrease of \$19,350 in the amount of funds tied up at present under the old law, which will be released for other purposes under the new Act.

We come then, finally, to the question of what changes this shifting of funds from present channels will have upon the income of the bank. According to the method followed by the Comptroller's department, it would appear that the country banks would profit as the result of the new law, and that the average bank would gain \$1,074.60 per year, as contrasted with its present income.

It is very likely, however, that many bankers will disagree with the assumption of the Comptroller's department that there will be a profit in the balance of the country bank with the Federal reserve bank, equivalent to three per cent of the amount of such balance. This conclusion inferentially assumes that the Federal reserve bank will pay interest at a rate at least equal to that now paid by reserve agents on balances now deposited with them, averaging about two per cent per annum. Elsewhere it has been pointed out why this may not be done. No explanation is forthcoming as to the additional one per cent, or as to why the assumption concerning the payment of interest is correct. The additional facilities which the reserve banks can offer to the country institutions through the handling of collections, the selling of exchange, the privilege of liberal rediscounts, etc., may indirectly prove equal to the balance of

one per cent, representing, presumably, these factors in the Comptroller's assumption.

Can the Balances with Reserve Agents Be Made more Profitable?—If a bank makes liberal rediscounts, it is very possible that a much larger sum might be secured under the new regime. Presuming that the bank can lend at six per cent and can rediscount at four per cent, there will be a profit of two per cent on the money thus secured from the Federal reserve bank. If there should prove to be an expansion in rediscounts over the present amount, the additional profit arising from the increased business would, presumably, have to be credited to this item in the Comptroller's calculation.

Many criticisms can be made to this method of measuring the material benefits of the new Act to the country bank. The calculation is presented here because it comes from a very authoritative source, and because, in so far as it goes, it is correct with the possible exceptions hereinbefore noted. The Comptroller's calculation, however, apparently does not entirely cover the situation. He has failed to take into consideration the balances which the country banks now have with their reserve agents, but part of which they may not count as a part of their reserve. The National Bank Act permits a bank to count, as a part of its reserve, balances with reserve agents up to sixty per cent of the required reserve. On October 21, 1913, the country banks of the United States, excluding Hawaii, had on deposit with reserve agents \$534,733,083, of which they could count \$320,033,974 as a part of their reserve. The Comptroller has failed to take into consideration the balance of \$214,699,099. If the clearing and collection facilities of the Federal reserve banks prove to be as good or better than those now provided by the present reserve agents, this surplus balance of \$214,699,099 can be withdrawn. It is certain that this surplus will be withdrawn, provided the country banks can find more profitable employment for it at home. Heretofore country banks have kept a considerable surplus with reserve agents, over and above their

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deposit reserve, in order to handle any demands which will be made upon them for exchange. If they keep a balance equal only to the amount that they can count as a part of their reserve, the sale of drafts or clearing operations would cause a technical deficiency in reserves. Again the banks at times have no use for idle funds, and send them to New York, because of the two per cent interest they can receive thereon. While it is not certain that all of this balance can be withdrawn, yet if such should be the case, the results, according to the Comptroller's method of calculation, would have to be revised as follows:

	Presuming surplus balance with reserve agent is \$30,078 per bank.
Interest on surplus funds at 6 per cent withdrawn from reserve agents after 3 years have expired.....	\$1,804.68
Less present interest received thereon at 2 per cent per annum	601.66
	\$1,203.12
Add profit as shown by Comptroller's method of circulation...	1,074.60
Total additional profits under new system.....	\$2,277.72
Ratio to average capitalisation of country banks (about \$85,800)	2.6 per cent

Of course this result must not be taken as authoritative. It is only inserted as suggestive of what may occur. It is impossible to determine the effect of the new Act upon the profits of the country banks. To make such an estimate it would be necessary to know exactly what would occur with reference to the shifting of reserves; the status of the national bank note; the extent to which rediscounting will be done; the relative success of the new machinery to be provided by or through the Federal reserve banks for the collection of checks or drafts; the extent to which the business necessity for deposits of large amounts in other institutions will be reduced or obviated; and many other similar matters. No one can answer these questions at this time. In the long run, however, it must be obvious that if the Federal Reserve Act succeeds in its purpose, the dependence of the country

banks upon the reserve city and central reserve city banks will be greatly reduced, if not practically eliminated. If this condition develops, the profits should increase through the withdrawal of all or the larger proportion of these balances, now earning a very nominal rate of return. The key to the question of profits is primarily to be found in the course which will be pursued with reference to these deposit balances.

Other Advantages to the Country Banks.—It is impossible to appreciate at this time the incidental and collateral advantages which, if the Act is successful, will accrue to the country banks. The mere prestige of being a member bank will be very great, and should have a much larger element of value than has attached merely to being a national bank. The Federal Reserve Board and the Federal reserve banks should impose much stricter standards of examination than have heretofore prevailed. This should reduce bank failures to a very considerable degree, and with such a reduction will come a general popular appreciation of the greater safety of the member banks over nonmember institutions, which will be subjected to less rigid scrutiny and discipline. Moreover, if the machinery for clearing checks and drafts is perfected to the fullest extent, the facilities which a member bank can give to its customers should be greatly increased. Checks will be collected more promptly, collection charges will be altogether eliminated or reduced, and drafts can be purchased which will be received anywhere in the country. These and other advantages will be appreciated by the business public. Finally, the additional powers given to national banks, such as the right to loan a considerable proportion of their deposits upon real estate mortgages, and to act as executor, administrator and trustee under conditions to be approved by the Federal Reserve Board, will have a positive commercial advantage.

Looked at from any stand-point, there seems to be no reason to doubt that the country banks will be much better off as member institutions than they would be if they withdrew from the national system and took out State charters.

Administrative Changes in Banking Legislation.—In

beginning our study of the effect of the law upon the several classes of national banks some account must be taken of those changes in the banking law which will modify administrative practices. The Federal Reserve Act modifies in certain respects portions of the National Bank Act dealing with administrative matters. These changes do not refer solely to the country banks, and what follows applies with equal force to reserve city and central reserve city institutions. In the main, the changes are for the purpose of giving binding legal force and effect to administrative rulings and practices, heretofore inaugurated by the Comptroller of the Currency. These practices have been reasonably well observed, but the absence of specific penalties for failure to meet the requirements of the Comptroller has been in some cases a source of weakness. In order to remove the loop-hole created by this situation the Federal Reserve Act has amended the National Bank Act, in order to grant specific authority for the enforcement of these practices.

New Provisions Concerning Examinations.—One of the most important changes consists of a recasting of Section 5240 of the United States Revised Statutes dealing with the appointment of bank examiners and their compensation. By the amendment, the Comptroller of the Currency continues as before to appoint the bank examiners, but the law now specifies that every member bank shall be examined "at least twice in each calendar year and oftener if considered necessary," instead of as heretofore that the bank shall be examined "as often as shall be deemed necessary or proper." A proviso is inserted giving to the Federal Reserve Board power to authorize examination by the State authorities of State banks and trust companies, although the board may at any time direct the holding of a special examination of State banks and trust companies that are stockholders in any Federal reserve bank. The power of the examiner to require the coöperation of banking officials is extended, he now having the authority to make a thorough examination of all of the affairs of the bank, to administer oaths and to examine any of the officers and agents

thereof under oath when he deems this course necessary. The Federal Reserve Board is given the power, upon recommendation of the Comptroller of the Currency, to fix the salaries of all bank examiners. The expense of examination shall be assessed by the Comptroller upon the banks examined in proportion to the assets and resources held by them on the dates of their examination. In addition to the examinations made by the Comptroller of the Currency, every reserve bank may, with the approval of the Federal reserve agent or of the Federal Reserve Board, provide for the special examination of the member banks within its district. The expense of such examination shall be borne by the banks examined. The law specifies that "such examination shall be so conducted as to inform the Federal reserve bank of the condition of its member banks and of the lines of credit which are being extended by them."

The amendment to the National Bank Act which the Pujo Committee endeavored to have Congress authorize at the time of its investigation, by which Congress should have the power to examine the affairs of the banks by either House thereof or by any committee of Congress or of either House, has been inserted in the new law.

Modification of System of Fees.—The old system of fees, as provided in Section 5240, has been stricken out, the new method of payment being not a flat rate but one which can be fixed by the Comptroller and which will bear a proper relation to the cost of the examination.

Section 22 of the Federal Reserve Act prohibits any member bank or any of its officers, directors or employees to make any loan or grant any gratuity to any bank examiner under penalty of imprisonment for not exceeding one year or \$5,000 fine, in addition to the sum loaned or granted, or both. Any examiner accepting a loan or gratuity from such a source shall be guilty of a misdemeanor and liable to imprisonment for not exceeding one year, or a fine of not more than \$5,000, together with a sum equivalent to the loan or gratuity, or both, and shall forever thereafter be disqualified from holding office as a national bank examiner.

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No officer, director, employee or attorney of a member bank shall receive any fee or gift in connection with the transaction of any business of the bank other than the usual salary or director's fee paid for ordinary services rendered. These provisions amending Section 5240 are not to take effect until sixty days after the passage of the Act, that is to say, not until February 22, 1914.

Stiffening the Law Relating to Stockholders' Liability.

—In addition, the much sought amendment endeavoring to fix more firmly the liability of the stockholders for the debts of insolvent national banks has been at last enacted. Section 23 of the Act provides as follows:

“The stockholders of every national banking association shall be held individually responsible for all contracts, debts, and engagements of such association, each to the amount of his stock therein, at the par value thereof in addition to the amount invested in such stock. The stockholders in any national banking association who shall have transferred their shares or registered the transfer thereof within sixty days next before the date of the failure of such association to meet its obligations, or with knowledge of such impending failure, shall be liable to the same extent as if they had made no such transfer, to the extent that the subsequent transferee fails to meet such liability; but this provision shall not be construed to affect in any way any recourse which such shareholders might otherwise have against those in whose names such shares are registered at the time of such failure.”

Authorization of Foreign Branches.—A privilege granted to national banks, which will be appreciated by the large institutions in our big cities, is the right to establish foreign branches under certain conditions. Only banks having a capital and surplus of one million dollars are eligible to this privilege, which is to be exercised under such rules and regulations as may be prescribed by the Reserve Board. Any bank desiring this privilege shall make application specifying its name, capital, place of doing business, and the amount of capital set aside for conducting its foreign business. If this application is approved by the Reserve

Board, the bank may thereupon establish foreign branches in accordance with the application. Every bank establishing foreign branches is required at all times to furnish information concerning the condition of such branches to the Comptroller of the Currency upon demand. The Federal Reserve Board possesses the power to make special examinations of foreign branches at any time. The accounts of the foreign branches shall be conducted independently of the accounts of other foreign branches established by it and of its home office. The bank shall, at the end of the fiscal year, transfer to its general ledger the profit or loss accruing at each branch, as a separate item.

CHAPTER XXX

THE RESERVE CITY BANKS UNDER THE NEW LAW

General Advantages to Reserve Banks.—If it is true that the country banks will profit under the new system and that membership will be a decided business advantage to them, it is even more true in the case of the reserve city banks. As we come up the scale, the profitableness of membership continues to be evident, all classes of national institutions sharing in the benefits. This is true not only as regards profits, but it is true with respect to collateral advantages. The danger of panics or other business disturbances crippling or ruining a bank increases with the amount of bankers' deposits that it holds. A reserve city institution is much more likely to be ruined than a country bank, while the central reserve city institution is the most vulnerable of all. The only difference between the position of the three classes of institutions is that if the country bank shuts its doors it is ruined, for the community will never have confidence in it again. If this harsh rule had prevailed with reserve city and central reserve city banks, they would have ceased to exist after most of the six convulsions which have shaken the financial world in the last fifty years. Suspension of cash payments by the central reserve city and reserve city banks during crises has come to be recognized as a customary thing, and no particular stigma attaches to these institutions because of their inability to meet their obligations at such times.

Each Bank Will Be Safer.—While the reserve city and central reserve city banks have been able to weather financial storms by disregarding their obligations for the time being, yet such a course, unless generally resorted to, is not open to any particular institution. A general panic will

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bring about universal suspension and no bank suffers. Where the drive is at one, or at a few institutions, it will ruin them if they suspend. This was conclusively proven in the case of the Oriental Bank and a number of other solvent institutions wrecked in or following the panic of 1907. Every reserve city or central reserve city bank is subject to the possibility that some unfounded rumor or unfortunate occurrence will cripple or ruin it because it can not suspend payments, and because it can secure the cash necessary to meet the claims of its frightened depositors only by the most ruinous sacrifices, if at all.

Suspensions Should Be Unknown.—As many bankers have phrased it, the new Federal Reserve Act will enable them to "sleep better at night." This haunting dread of sudden disaster will largely vanish; for if the reserve city or central reserve city bank has a large proportion of its assets invested in prime paper, eligible for rediscount, it may feel secure because of its ability to go to the Federal reserve bank and convert its assets into cash at short notice. The repetition of such scenes as disgraced American banking in 1907, where perfectly solvent institutions which had been well managed were wrecked either through the absence of any means of saving them, through the failure of coöperative effort among the bankers of their community, or through inexcusable mismanagement by the clearing house, should be impossible in the future. If the Federal Reserve Act does nothing more than this, it will have justified its existence in so far as reserve city and central reserve city banks are concerned.

Act Forces the Hand of the Reserve City Banks.—We have already seen that the Federal Reserve Act cleverly forces the hand of the reserve city and central reserve city bankers by requiring them to accept its provisions and apply for membership in the Federal reserve banks within sixty days from the signing of the measure; that is to say, on or before February 22, 1914. Failure to do so will render the bank liable, at the discretion of the organization com-

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mittee or the Federal Reserve Board, to be deprived of its privilege of acting as a reserve agent. This provision practically forces the reserve city and central reserve city banks into the system. They could not as a class meet their obligations to the country banks if the letter of the law were strictly applied, owing to their inability to convert a sufficient amount of resources into cash within the time specified, without great sacrifice to themselves and tremendous loss to the business community which they serve. For any reserve city bank, a large proportion of whose deposits are the funds of other banks, to consider surrendering its charter and failing to become a member is absurd. For this reason, if for no other, it is practically certain that all reserve city and central reserve city banks will become member institutions.

Relative Profits under the Old and New Systems.—Following the same plan pursued in analyzing the effect of the law upon the country banks, and using the Comptroller's method of calculating changes in profits, let us see what will be the relative profitableness of the average reserve city institution under previous conditions, and also three years after the Federal Reserve Act has been put into operation:

RESERVE CITY BANKS.

Assuming that country banks finance one-half of Federal bank payment from own vaults and call on reserve city and central reserve city banks for balance in equal proportions.

Items (for an average bank).	Under old system.	After three years.
Net demand deposits.....	\$5,631,000	\$5,363,000
Net time deposits.....	468,000	468,000
Total deposits.....	<u>\$6,099,000</u>	<u>\$5,831,000</u>
Reserves in own vaults.....	\$762,400	\$376,284
Reserves with reserve agents.....	762,400	.....
Reserves with Federal reserve bank.....	.....	<u>\$52,866</u>
Total reserve.....	<u>\$1,524,800</u>	<u>\$838,850</u>
National bank notes outstanding.....	\$822,200	\$504,795
United States deposits.....	112,100	.....
Capital stock of Federal reserve bank.....	.....	42,900

The above changes would have following effect (reserve city banks, free funds):

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	Decrease.	Increase.
Upon loanable funds:		
Decrease in net deposits.....	\$268,000	
Decrease in reserve, less 5 per cent redemption fund.....		\$669,840
Retirement of circulation (1/40).....	17,408	
Sale of bonds.....		84,800
Withdrawal of United States deposits..	112,100	
Purchase of Federal reserve stock.....	42,900	
Total.....	\$440,408	\$754,140
Net increase in free funds.....	.....	313,735
Upon income:		
Loss on profit of circulation about 1.2 per cent.....	\$308.86	
Profit on balance with Federal reserve bank about 3 per cent on \$553,566....		\$16,576.98
Loss on deposits withdrawn from reserve agents 2 per cent on \$762,400..	15,248.00	
Dividends on stock Federal reserve bank.....		2,574.00
Total.....	\$15,456.86	\$19,150.98
Net gain in income.....	.....	\$3,694.12

All of the facts upon which this calculation is based, such as net demand deposits, time deposits, bonds deposited with the United States, etc., have been secured by dividing the total of each item for all reserve city banks in the United States by the number of reserve city banks, thus giving us the average condition for each institution. It is possible, of course, for any one to work out a similar computation for any individual bank, using the actual figures in that case.

We find that upon this basis there is a net increase in free funds available for investment of \$313,735, practically all of which is due to the decrease in the reserve requirements under the new law. In calculating the decrease of the reserve requirements, account has been taken of the fact that the five per cent redemption fund can no longer be included as part of the bank's reserve. The method followed has been to take the net decrease in reserve as between the conditions under the National Bank Act, and under the new Act three years after the establishment of the new reserve system, subtracting therefrom the amount of the five per cent fund, just as though it had been included as an increased item of investment upon which no income would be derived.

According to the basis employed by the Comptroller, the

net increase in the earnings of the average reserve city bank would be \$3,694.12 a year. This amount is predicated almost entirely upon the assumption that the balance on deposit with the Federal reserve bank will earn about three per cent. We have already considered the question as to whether this is a fair assumption. Experience alone can show whether the balances will be as profitable as this. An accurate estimate would apparently have to take into account the balances remaining on deposit with the central reserve agents after the new reserve requirements have been completely adopted. We have seen, however, that in all probability these reserves will be largely, if not entirely, exhausted in the process of meeting the reserve requirements of the Federal Reserve Act. Therefore this additional element of profit is so speculative that no calculation can be based upon it. Indeed, it is unlikely that any considerable amount of reserve will remain with the central reserve agents after the new law is in full force and effect.

CHAPTER XXXI

EFFECT OF THE SYSTEM UPON NEW YORK AND OTHER CENTRAL RESERVE CITIES

Difficulty of Accurate Estimates.—Anyone who has reviewed the calculations in the chapter on “The Shifting of Reserves in Central Reserve Cities” will realize how difficult, if not impossible, it is to make an adequate estimate of the effect which the new law will have upon the profits of central reserve city banks. There are so many elements of uncertainty over which these institutions have no control, which must be considered, that it is almost, if not quite impossible to reach any intelligent conclusion as to the final outcome. The calculations which follow are intended by the authors not as a representation of what will, in their judgment, occur, for they do not care to venture any specific prediction; but are inserted only as generally illustrative of the method by which, if the facts could be known, the effects of the changes upon the reserve city banks could be estimated.

Calculations Based on the Average Institution.—As the basis of our comparison we have taken the assumption which we heretofore found to be the most probable during the next few years, viz.: the loss of only a part of the reserve deposits now held by the central reserve city banks. An attempt has been made, as heretofore, to reach the average amount of the several important items held by each institution, by taking the total of each for all of the central reserve city banks of the country, and dividing it by the number of central reserve city banks. Upon this basis, the comparative items, subject to change after the reserve requirements have been finally established, would be as follows:

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CENTRAL RESERVE CITY BANKS

(Average of 52 banks.)

Assuming country banks withdraw one-quarter of Federal bank payments from central reserve agents, and that reserve city banks finance themselves as far as possible. (Assumption No. 2.)

Items.	Under old system.	After three years.
Demand deposits.....	\$29,336,000	\$24,817,000
Time deposits.....	299,000	299,000
Total deposits.....	\$29,635,000	\$25,116,000
Reserves in own vaults.....	\$7,408,750	\$1,494,004
Reserves with Federal bank.....	.....	2,988,006
Total reserve.....	\$7,408,750	\$4,482,010
National bank notes outstanding.....	\$1,480,845	\$1,431,000
United States deposits.....	229,700	.....
Capital stock of Federal bank.....	.....	200,500

Effect of Act upon the Bank's Income.—Upon the basis of these assumptions, the relative increase and decrease of loanable funds, by items, and the effect which these changes would have upon the bank's income would be as follows:

The above changes would have the following effect (central reserve city banks):

Items.	Decrease.	Increase.
Upon loanable funds:		
Decrease in net deposits.....	\$4,519,000	
Decrease in reserve (less 5 per cent redemption fund).....	.....	\$2,855,190
Retirement of circulation (1/30).....	49,345	.....
Sale of United States bonds.....	229,700	151,600
United States deposits withdrawn.....	200,478	.....
Purchase of Federal reserve stock.....	.....	.....
Total.....	\$4,998,523	\$3,006,190
Net decrease.....	1,992,833	.....
Upon income:		
Loss of profit on circulation about 1.9 per cent.....	\$592.14	
Profit on balance with reserve bank about 3 per cent.....	.....	\$149,640.18
Dividend on Federal reserve stock 6 per cent.....	.....	12,030.00
Total.....	\$592.14	\$161,670.18
Net gain in income.....	.....	161,078.04

Central Reserve City Banks Fare Well.—It is not believed that any general comment is necessary, since the method followed is identical with that pursued in the preceding studies concerning the country and reserve city banks. As no new problems are introduced, the assumptions are the same throughout. Upon the basis of these assumptions it will be seen that the net increase in the profits of the average central reserve city bank will be approximately \$161,078.04. Upon the basis of an average capitalization of approximately \$3,512,500 per bank, this sum would represent an additional return of approximately 4.6 per cent. Because of this excellent showing for the central reserve city banks there has arisen a charge, frequently heard during the hearings on the bill, that the law was unduly favorable to these institutions, as contrasted with its benefits to the other classes of banks.

Historically, the great majority of our difficulties have arisen because of the inability of the central reserve city banks to met the requirements placed upon them by the National Bank Act and by actual conditions. The breakdown has always come with that class of institution, disaster spreading to the reserve city and country banks. Will these institutions cease to be the weak spot in our banking system? If so, most of the banking difficulties which have beset this country in the last fifty years will disappear.

The withdrawal of reserve accounts from the central reserve city banks will be a severe experience. Some institutions may be reduced in size, power and prestige will correspondingly diminish, officers will be released and the services of many clerks dispensed with. It is inevitable, under such conditions, that much complaint will be heard against the unfairness and short-sightedness of the Act. As a matter of fact, there is no doubt that any banking law which would perpetuate the highly unscientific and dangerous system of the deposit of reserves in institutions unfitted to handle them, and conducting their operations in direct violation of the methods followed in every other country of the world, is foredoomed to failure.

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Greatest Achievement Has Been to Reform the Reserve Situation.—The greatest achievement of President Wilson and his coworkers in the House and Senate was in overcoming the determined opposition of the central reserve and reserve city bankers to this part of the law. The enactment of this one feature stamps the Act as incomparably better than the Aldrich bill, and as one much better than the country had any reasonable expectation of securing. As time passes and the vista becomes more perfect, the extent of this great victory will be more apparent.

But even though the present system is inefficient, will the new one be any better and will it serve the needs of business as well, or more perfectly? Upon the answer to this question depends the nation's verdict. Little can be said in defence of what has been. As to the record which time will write, nothing definite can now be known.

The Most Serious Defect in the Act.—It is hoped by the supporters of the Federal Reserve Act that the unnatural and illogical concentration of money in New York City, which has been induced by the payment of two per cent interest on bankers' deposits, may be discontinued. The ability of the New York banks to loan this money upon stock exchange collateral at call and on time has been responsible for this condition. By taking the greater part of the "country money" out of New York City, this condition will largely disappear; and, as we have seen, the New York banks will in addition probably curtail their loans or investments in commercial paper bought from note brokers, to furnish, in whole or in part, the money which they must refund. The successful readjustment of the reserves of the country is determined to a large degree by the willingness of the banks in our reserve cities, and of our country banks, to purchase prime commercial paper with the funds thus recalled.

The great defect in the Federal Reserve Act is the inability of the Federal reserve banks to loan directly on the market, or to invest in commercial paper offered to them by note brokers or by borrowers. Such a power is possessed

by every central bank in the world, and has been found of great value to those institutions. It will be very difficult to convince a reserve city or a country banker that he should buy Armour & Company or John Wanamaker paper, for example, simply because the central reserve city banker can no longer purchase it, due to the fact that it is necessary for him to curtail his loans to raise money to refund bankers' deposits. It will be peculiarly difficult to convince these bankers that they should make larger investments in commercial paper, when to do so will require them to rediscount in order to procure the necessary funds.

The Vital Problem before the Country.—The final result of the Federal Reserve Act will be to take between \$420,000,000 and \$672,000,000 of loanable funds out of their present channels, and sequester them in the vaults of the eight to twelve Federal reserve banks. So far as the citizens of this country are concerned, as has been elsewhere pointed out, this money can get back into the channels of trade only through rediscounting by member banks, or by the purchase of domestic or foreign drafts on the open market. Every merchant realizes that the draft is an unpopular method of financing business in this country. To be drawn upon is, in many sections, a sign of weakness, and betokens the failure of the debtor to pay his debt when it becomes due. The great majority of this capital can be placed at the service of our banks only through rediscounts.

We have seen that a large proportion of the banking fraternity has a decided opinion against rediscounting. They hold it to be bad banking. Will it be possible completely to change their opinions and to make rediscounting popular in the space of a few months? It can readily be seen that the answer to this question determines to a large degree the success of the new Act. Nothing more clearly demonstrates the power of the banks of this country to make the Act a failure, and to do so unconsciously and without premeditation. We have seen that, to a considerable degree, rediscounts will be necessary, and it is to be hoped that the example of the big central reserve city banks will prove

efficacious and that a reasonable amount of rediscounting will occur in order to liberate the funds which are tied up in the vaults of the Federal reserve banks.

Universal Interest in the Effect upon New York City.—The effect of the Federal Reserve Act upon New York City will be watched with greater interest than will its effect in any other part of the country, except in the observer's own locality. All eyes will be upon the nation's metropolis, some to see whether it will accomplish the boasted end of destroying speculation on the New York Stock Exchange, which has unsettled values and tied up a considerable proportion of the resources of the country in the worst class of operation. Some will look with concern lest the new law, by suddenly depriving stock and investment markets of funds, will create disorganization, palsying new construction which must be financed through the sale of securities, and unsettling the value of collateral upon which thousands of business men have negotiated loans to carry on their enterprises. Others will be interested to see whether New York's power and prestige will be diverted in part to other centers, with the localization of funds in these new districts. Every one will be interested to know whether it will destroy or impair the efficacy of the so-called "Money Trust," which is founded primarily upon the control of a comparatively small number of banking institutions that hold these bankers' deposits from the other sections of the country.

Will Cheap Money for Stock Exchange Uses be Available?—It is impossible to answer any of these questions authoritatively. It would appear that the day of exceedingly cheap money for stock exchange uses is past. Without a law which renders an enormous amount of money idle, thereby enabling the New York banks to attract it to New York with a two per cent interest rate, it will be impossible for the New York institutions to offer call money at an average rate of about two and one-half per cent, as has been the case within the last ten years.

The stock speculator and the investment banker who are carrying securities until such time as they can dispose of

them, will have to pay rates of interest approximating those which have prevailed abroad and which are determined with reference to the rates paid by commercial borrowers. Call loans will probably be offered at attractive rates in limited amounts, but the great majority of money will probably be secured at interest rates of four per cent or over. Certain New York bankers expressed the opinion before the Congressional committees that it would be impossible to deprive New York of funds for stock exchange uses, so long as the borrowers were willing to pay a good rate of interest. A comparatively small number of New York City banks now have funds of 15,000 other banks. These gentlemen predicted that these institutions could induce the out-of-town banks to rediscount commercial paper at, say three or four per cent, which might then be the rate, forwarding the proceeds to New York to be loaned out upon stock exchange collateral at, say five or six per cent. The profits to be derived from this transaction are, in their opinion, so obvious as to tempt many bankers. Such a practice, if it should develop to any large degree, would be unfortunate, for by indirection it would work an evasion of the plain intent of the Act.

Ways to Check Drain of Money to Wall Street.—It would be very difficult for the Federal Reserve Board to locate the extent to which this practice was being carried on. It might assume that banks were borrowing to finance local needs when, as a matter of fact, the money was being sent to New York. An energetic search conducted by the examiners of the Federal reserve bank or of the board would, of course, indicate the extent of the practice and the institutions engaging in it. Once this was discovered, it would be possible to apply corrective measures, concerning the efficacy of which there can be no doubt. The offending bank would be informed that it must call its loans or be refused further accommodation by the Federal reserve bank, while the board could effect a change by advancing the rate of discount for the region in which offending member banks were situated. The latter course, however, would be unfortunate because, in

stamping out the surreptitious sending of money to New York, legitimate business would be penalized and business conditions unsettled.

Looked at from another stand-point, however, the matter does not seem to be as serious as might appear on the surface. There is abundant testimony to support the statement that it is very difficult to carry on profitable speculative operations on a large scale with high interest rates; but so long as the money was not being used to conduct feverish and undesirable speculation, from a national stand-point, there is no reason why New York should not be allowed to attract it.

Methods of financing stock exchange speculation may be radically altered. Already there is talk of going over to the English system of fortnightly settlements, which would greatly decrease the amount of money necessary to finance stock exchange operations. This, however, is but a suggestion; and it is very possible that public opinion, or even restrictive legislation, will interfere with such a plan, even though it may be under serious consideration.

Has New York Reached Her Zenith?—Looking at the matter from the stand-point of the next generation, there is much evidence to support the contention that New York's overwhelming supremacy in the financial affairs of the United States has run its course; and that, by comparison with the other great cities of the country, she will gradually decline, not necessarily through any diminution in the actual amount of her business, but because of the very rapid growth of other centers. Chicago, in the last few years, has been forging ahead at a tremendous pace as an investment banking center. If the same relative progress is maintained by the two cities, the time will come, and that within a very few years, when she will rival New York as a center for this business. The rapid growth in the material wealth of the West, the increasing appreciation of the advantages of security investments, and many other factors are responsible for the imposing progress of Chicago.

The Rise of Other Cities.—The same development which

has occurred in Chicago has been duplicated on a smaller scale in many other of our larger cities. Even under the old banking system, New York was relatively losing ground. With the segregation of the banking assets of the country into eight to twelve groups, a much larger degree of local banking independence will occur. There is really no impelling reason why the reserves of the Middle West, or of the Southwest, or of any other section of the country should be sent to New York, unless it be frankly for employment in stock exchange operations. It is possible, as a banking problem, to develop a method of selling commercial paper in Chicago or St. Louis or San Francisco or New Orleans as readily as it can be sold in New York City. With no defenders of the use of the nation's reserve in stock exchange speculation, therefore, there remains no reason why New York and, to a lesser extent, Chicago, should be given this unusual monopoly advantage.

New York will for many years to come be the commercial center of the United States, because it is the point through which the greater proportion of her imports and exports passes. She will incidentally be the leading center of all foreign exchange operations. Happily the day of the concentration of the banking reserves of the country in the hands of ten or more institutions of one city is almost over.

CHAPTER XXXII

STATE BANKS AND THE NEW LAW

Advantages of National Banks.—Having reviewed the probable effect of the new law upon the various classes of national banks, let us investigate its probable influence upon the State banks and trust companies. In the past, the national banks have had several advantages over the State institutions. First among these has been their right of note issue. In a previous chapter we have pointed out that the advantages of this are by no means great and that many of them are indirect. It should be borne in mind that such advantages as have existed might be turned into a distinct loss if the price of the bonds purchased to secure the notes should fall to any considerable extent. Such a fall occurred during the year 1913, and many of the banks have been compelled to write off the premium which they paid for these securities and formerly carried as an asset on their books.

Acting as Reserve Agents.—Another advantage has been that the national banks have been allowed to act as reserve agents for other banks. This applies especially to those institutions located in reserve and central reserve cities. The country banks have been allowed to deposit a part of their reserves with the reserve or central reserve city banks, and the reserve city banks have deposited a part of their reserves with the central reserve city institutions. This privilege has also been extended, by the laws of various States, in such way as to be of great value to the national banks. Thus many of the States authorize the State institutions to keep a part of their reserve with other State institutions, approved by the State banking commissioner as reserve agents, or with national banks in reserve and central reserve cities that have been approved for such purposes by the Comptroller of the Currency and

the State Banking Commissioner. Thus there have come into the vaults of the national banks in the great cities large deposits from the smaller institutions on which they pay interest, ordinarily at the rate of two per cent per annum. They have been able to lend these funds in the open market at whatever rates were current.

That this privilege has been valuable is shown by the eagerness among many of the national banks to secure these deposits. A large number have sent representatives through the country to solicit such accounts and some of the larger institutions have secured thousands. It is only fair, however, to point out that the value of this right to act as reserve agents is somewhat qualified by two factors. In the first place the reserves kept in the large cities by the smaller institutions are usually cut down at the very time when conditions in the money market are most favorable to the lender and kept high when interest rates are low. This merely qualifies the profitableness of this business and does not imply that it is not, on the whole, remunerative. The second feature is the fact that by a sort of unwritten law the city banks that hold these reserves must lend to their country bank depositors when requested to do so. It is often alleged that this is not a disadvantage to the city bank, since it is usually in a position to exact a high interest rate when it grants the loan.

Depositaries of the Federal Government.—A third advantage possessed by the national banks has been their right under the Federal law to act as depositaries for government funds. Upon government deposits they are required by law to pay a rate of interest not less than one per cent per annum, and at present the Secretary of the Treasury is requiring them to pay two per cent. They are also required to place with the Treasurer at Washington bonds to secure the funds deposited with them. The loss that has occasionally been suffered by the national banks through a decline in the value of the bonds deposited to secure circulation has also to be considered, since government bonds have been and are still largely used for this

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purpose. Of the \$110,886,611 par value bonds held on January 7, 1914, to secure deposits of public money with the national banks over one-half or \$58,260,811 were State, county, city and other securities. The balance were bonds of the United States government and of its dependencies. A decline in any of these securities would mean a loss to the banks that had placed them in trust, and such loss has been especially noticeable on the United States two per cent bonds which are held in large amounts for this purpose. Although it is not always the case that there is a large profit to be derived from receiving these government deposits, there is a certain amount of prestige that attaches to a government depository, and this doubtless compensates for any disadvantages.

The Name Gives Prestige.—A final advantage possessed by the national banks has been that a considerable amount of sentiment attaches to the name itself. It is often the case that promoters of a new bank determine to charter the institution under Federal laws because the name "National Bank" carries weight with many people who fancy that it is entirely safe in its operations. Even persons who are thoughtful consider that the more strict supervision and careful examinations conducted by the Federal officials make the national banks more reliable. Thus the name itself has an attraction, and doubtless many institutions now incorporated as national banks would hesitate to lose the advantage that there may be in the name itself.

Advantages Possessed by State Banks.—Turning from the advantages possessed by the national banks to those attaching to State institutions, we find that they are numerous and in some cases of great importance. First to be noticed is that, with the exceptions already mentioned, a State bank may do practically everything that is done by a national bank. Some of them may act as reserve agents for other State institutions and many of them, of course, receive deposits of State and municipal funds, although they do not receive Federal deposits. A second

advantage is their right, in many instances, to lend on real estate security. The national bank act, while not specifically denying to national banks the right to lend on real estate, forbids their owning it and, by specifying only the right to lend on personal property, by implication denies to them the right to lend on real property. The law governing State institutions varies in this particular. The majority of States do not forbid such loans. A large number of them limit the right to own real estate, and loans thereon are restricted in California, Michigan, Minnesota, New York, North Dakota, Ohio, Oklahoma, Pennsylvania, South Carolina, Texas and Wisconsin. Even in these States the chief limitations are to first liens or to a limited percentage of the capitalization of the bank or to a fixed percentage of the value of the land.

Investments not so Closely Limited.—A third advantage of State incorporation has been that such banks are usually allowed to invest their funds in stocks and bonds. The right of national banks to purchase bonds is by no means clear, but has been upheld as the purchase of promissory notes, and hence similar to the ordinary transaction of discounting a note. Investments in stocks, on the other hand, are clearly illegal for national banks. Such investment is not authorized directly or indirectly by the national bank act and has been repeatedly denied by the courts, which have held that such purchase is not authorized and would be equivalent to entering upon another line of business than that for which the charter was granted. State banks are not so closely limited.

Still another advantage possessed by the State banks has been the right to act in a fiduciary capacity. This applies primarily to trust companies, but inasmuch as it is easy, especially in the large cities, for an institution to incorporate as a trust company and still give a large part of its time and attention to ordinary commercial banking, there is no reason why a State institution, which so desires, can not engage in this business.

Differences in Reserve Requirements.—There has here-

tofore been an advantage to many State institutions in the lower reserve requirements imposed by the State laws. In many cases a smaller amount is demanded than in the law for national banks, the ordinary requirement being fifteen per cent, although in some cases it is twenty or twenty-five. No matter what criticism may be made as to the wisdom of the State laws, this lowered requirement is often an advantage. Even though the judgment of the State bank may dictate a larger reserve than the required minimum it may, upon occasion, fall below its own self-imposed standard and still not break the law. Of course, in most cases there is little attempt to keep more than the legal minimum, and even where the reserve requirements are nominally high there are a good many qualifications which lessen their severity. Thus in Connecticut, of the fifteen per cent required, four-fifteenths must be in cash, while eleven-fifteenths may be in deposits with other institutions, or one-fifth may be in securities. The eleven-fifteenths may thus be divided between deposits and securities or all be in the form of deposits with other banks.

National Bank Notes in Reserves.—A final advantage possessed by the State banks is their right to use national bank notes as reserves. National banks are not allowed to count in their reserves either their own notes or those of other national banks. The State laws permit the use of these notes. The result has been the growth of the practice already referred to of the national banks exchanging their notes with State banks for lawful money. It has, also, led to the practice of the same group of men who are directors and officers of national banks organizing State institutions under the same management. This close union of two separate corporations having practically the same officers and directors, allows the one group of men to engage in different lines of banking and secure the combined advantages of the Federal and State laws. Thus a national bank, closely associated with a State bank and trust company, may issue notes and engage in commercial banking. The associated State institution will handle the trust busi-

ness, own and lend on real estate within the limits of the State law, and readily deliver from time to time any lawful money that comes into its possession, to the national bank, receiving in return national bank notes which may be used as a part of its reserve.

Effects of the New Legislation.—Having thus summarized the advantages under the former law of the two classes of institutions, we are ready to examine the actual and relative effects of the new legislation upon the State banks. At the outset it should be noted that some of the State banks will find themselves unable to decide the case on its merits because of restrictions in their State laws. In many States it is illegal for banks to own stock in other banking institutions, and there has already developed a considerable difference of opinion as to whether this restriction forbids the purchase of stock in the Federal reserve banks. It is reported that the Attorney General of Michigan, in response to a request for a ruling from the State Banking Commissioner, has rendered an opinion to the effect that under the Michigan banking law State banks can not purchase the Federal reserve bank stock. On the other hand, in Missouri the Governor and the Attorney General are said to agree that the Missouri statute prohibiting one corporation from holding the stock of another is not applicable to corporations which acquire stock of another concern engaged in something which is incident to the business and welfare of the corporation acquiring such stock.

These difficulties are perhaps only temporary and of minor importance in the long run, but must, of course, be removed before action may be taken by many State institutions. In this connection it should be noted that the State banks are not compelled to join the system as are the national banks. National banks in reserve and central reserve cities must make application for membership prior to February 22, 1914, or cease to act as reserve agents. All national banks must enter the system prior to December 23, 1915, or forfeit their charters. State banks, how-

ever, are free to watch the new system for a time and determine their course of action by its success or failure. No time limit is set for their entrance, and there is no reason why they should hasten to join in case they feel disposed to delay.

Advantages of Entering the System.—Among the advantages that will accrue to all State banks upon entering the system, we may notice, first, that there is offered a probable six per cent return on the money paid in on stock subscriptions. This is, of course, dependent upon the success of the reserve banks. Another advantage is the additional prestige and influence that will come from Federal supervision with the strict examinations that are conducted by the Federal officials and the rigid reports that must be made in response to the calls of the Comptroller. No matter what the disadvantages, this advantage will doubtless be of value in attracting business.

Rediscounting and Securing Reserve Notes.—Turning from these less certain and somewhat intangible advantages to those that are more positive, the right that is given to all member banks in the system to rediscount their paper and secure Federal reserve notes is first in order of importance. The value of this may be somewhat problematical until experience shows the extent to which State institutions will be willing to abandon their objections to rediscounting—a feeling which they share with the national banks. If they can bring themselves to a belief that such a practice is good banking, they will have at their disposal a means of securing prompt action in time of need and through their membership in the system will have access to the concentrated reserves of the entire United States. The reserve bank will be able to focus its power upon any weak spot in the entire district and if necessary will be able to secure, with the approval of the Federal Reserve Board, the aid of every other reserve bank in the United States. Without membership in the system the State banks may, of course, be able to secure a certain amount of assistance from their reserve agents, as in the past. They may

even be able to get help from the reserve banks by securing discounts through a member bank, if the Reserve Board, under the power conferred in Section 19, should permit it. Such permission, if given at all, will probably be granted only when the situation is very serious.

Along with this advantage, although perhaps of minor importance to most State institutions, is the right to accept drafts or bills of exchange drawn upon them "growing out of transactions involving the importation or exportation of goods having more than six months' sight to run." These acceptances are not to exceed in amount one-half of the paid-up capital stock and surplus of the accepting institution and may be rediscounted if desired with the Federal reserve bank. To some institutions this privilege will be of value.

The New Reserve Requirements.—The reserve requirements of the new system may prove to be an advantage to some State banks and a disadvantage to others. Thus in New York City the banks in Manhattan are now required to maintain reserves of twenty-five per cent, fifteen per cent of which must be in cash in their vaults and ten per cent of which may be on deposit with other banks or trust companies approved by the Superintendent of Banking. If in the Federal reserve system these banks would have to keep in the reserve bank of this district a sum equal to seven per cent of their demand deposits. In the absence of any change in the law this would mean a total reserve of thirty-two per cent for Manhattan State banks joining the system, since the reserve bank to be established is not among the approved depositories. It may be that this difficulty can be obviated by the State Superintendent designating the reserve bank of the New York district as a depository for State institutions. Inasmuch as the national banks of New York City will be required to keep only eighteen per cent reserve, of which only six per cent need be in their own vaults, this point is of considerable significance. In some States, of course, the new law will impose a higher requirement than that now

imposed by the State statutes, although in a considerable number of cases there will be no appreciable difference.

Before leaving the subject of required reserves, attention should be called to the statement in Section 19 that reserves of State institutions that may be legally kept with another State bank may be counted as reserves within the meaning of the law during the first three years after the establishment of the reserve bank within the district, just as though they were deposits in a national bank in a reserve or central reserve city. Except as thus provided, however, "no member bank shall keep on deposit with any non-member bank a sum in excess of ten per centum of its own paid-up capital and surplus."

Checks Cleared at Par.—The most important of the advantages to State institutions entering the system is that they will be able to receive from the reserve banks immediate credit at par for all checks and drafts on other member banks within the district and will also be able, through the same provisions of the Act, to have checks and drafts on themselves pass at par within the district. This, and the possibility of having their checks pass at par throughout the entire United States, have been fully discussed in the chapter on "Clearing Checks and Drafts" and need not be repeated here. In this connection it may be noticed that under the provisions quoted at the end of the preceding paragraph, many State institutions now acting as depositaries for other banks will, unless they enter, be compelled to surrender most of the sums so held if the banks to which the deposits belong join the system.

Finally, attention should be called to the right of the State banks to continue all practices allowed by their State laws that are not in conflict with the Act. Among these are the right to establish branches, which is permitted in some States, and the right to lend on real estate to a greater extent than may the national banks.

Disadvantages of Entrance.—The disadvantages of entrance are by no means to be ignored. To some institutions the requirement that the capital of the State banks

that enter must be equal to that required for national banks in localities of the same population will be a distinct hardship. Some of the States allow banks to be capitalized for as small an amount as \$10,000. This fact alone will doubtless keep many out. In some instances the reserve requirements may have the same effect, although this difficulty is lessened by the fact that a large amount of the deposits of State banks in some parts of the country are time deposits and the new law requires only a five per cent reserve against them.

A third disadvantage to some banks will be found in the strict Federal examinations and reports, which will be viewed as burdensome by those which desire to conduct their business along lines which perhaps yield large profits but involve great risks. Still another limitation that will be imposed is that no member bank will be allowed to lend to any one individual an amount in excess of ten per cent of its capital, whereas the State banks in some cases allow twenty, thirty or even fifty per cent to be so loaned if properly secured. Finally, many of the State banks will have but little paper of the sort that will be acceptable for rediscount at the reserve banks.

Importance of the State Banks.—The importance of State institutions in determining the measure of success of the system may be emphasized by calling attention to the fact that in some States they outnumber the national banks. Thus, in Missouri, there are 1,231 State banks with a capital of \$53,000,000 and deposits of \$298,000,000, as compared with 133 national banks with a capital of \$36,000,000 and deposits of \$152,000,000. In Kansas there are 904 State banks with a capital of \$19,000,000 and deposits of \$99,000,000, while the national banks number 206 with a capital of \$11,367,500 and deposits of \$61,000,000. In Minnesota there are 759 State banks with a capital of \$17,400,000 and deposits of \$218,000,000, while the national banks number 272, with a capital of \$22,700,000 and deposits of \$105,000,000.

Conclusions.—It is hard to draw general conclusions

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because of the varying conditions prevailing in different States. Banks in some States will find that the laws under which they now operate differ so little from the requirements for national banks that there will be very little friction involved in entering. Others will find such wide differences that accommodation to the new requirements will be difficult. It may be in point again to observe that the State institutions are not required to enter and may very properly wait until they have had time for observation. Most of the rights which they now hold as State banks can be retained. Whatever pressure there is upon them to enter the system will arise out of the fact that membership will confer new advantages upon those that join and will consequently place at a disadvantage those that do not. The national banks, to a limited extent, may hereafter compete with the State banks for farm loans. They may, by securing special permission from the Federal Reserve Board, act as trustee, executor, administrator and registrar of stocks and bonds. This competition by the national banks may in itself be sufficient to compel some State banks to join.

Probably the most important factor influencing the action of the State banks will center about the possibility of collecting checks and drafts at par. This may be a distinct advantage to some banks and may be the force which will compel many to enter. How this will operate will be determined largely by the rulings of the Reserve Board. If the board promptly requires each reserve bank to act as a clearing house for member banks within its own district, the checks and drafts upon these institutions will, doubtless, pass at par. Any bank whose checks and drafts do not pass will be placed at a distinct disadvantage and will doubtless lose a large amount of business.

FEDERAL RESERVE ACT

[PUBLIC—No. 43—63D CONGRESS]

[H. R. 7837]

An Act To provide for the establishment of Federal reserve banks, to furnish an elastic currency, to afford means of rediscounting commercial paper, to establish a more effective supervision of banking in the United States, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the short title of this Act shall be the "Federal Reserve Act."

Wherever the word "bank" is used in this Act, the word shall be held to include State bank, banking association, and trust company, except where national banks or Federal reserve banks are specifically referred to.

The terms "national bank" and "national banking association" used in this Act shall be held to be synonymous and interchangeable. The term "member bank" shall be held to mean any national bank, State bank, or bank or trust company which has become a member of one of the reserve banks created by this Act. The term "board" shall be held to mean Federal Reserve Board; the term "district" shall be held to mean Federal reserve district; the term "reserve bank" shall be held to mean Federal reserve bank.

FEDERAL RESERVE DISTRICTS

SEC. 2. As soon as practicable, the Secretary of the Treasury, the Secretary of Agriculture and the Comptroller of the Currency, acting as "The Reserve Bank Organization Committee," shall designate not less than eight nor more than twelve cities to be known as Federal reserve cities, and shall divide the continental United States, excluding Alaska, into districts, each district to contain only one of such Federal reserve cities. The determination of said organization committee shall not be subject to review except by the Federal Reserve Board when organized: *Provided*, That the districts shall be apportioned with due regard to the convenience and customary course of business and shall not necessarily be coterminous with any State or States. The districts thus created may be readjusted and new districts may from time to time be created by the Federal Reserve Board, not to exceed twelve in all. Such districts shall be known as Federal reserve districts and may be designated by number. A majority of the organization committee shall constitute a quorum with authority to act.

Said organization committee shall be authorized to employ counsel and expert aid, to take testimony, to send for persons and papers, to administer oaths, and to make such investigation as may be deemed necessary by the said committee in determining the reserve districts and in designating the cities within such districts where such Federal reserve banks shall be severally located. The

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said committee shall supervise the organization in each of the cities designated of a Federal reserve bank, which shall include in its title the name of the city in which it is situated, as "Federal Reserve Bank of Chicago."

Under regulations to be prescribed by the organization committee, every national banking association in the United States is hereby required, and every eligible bank in the United States and every trust company within the District of Columbia is hereby authorized, to signify in writing, within sixty days after the passage of this Act, its acceptance of the terms and provisions hereof. When the organization committee shall have designated the cities in which Federal reserve banks are to be organized, and fixed the geographical limits of the Federal reserve districts, every national banking association within that district shall be required within thirty days after notice from the organization committee, to subscribe to the capital stock of such Federal reserve bank in a sum equal to six per centum of the paid-up capital stock and surplus of such bank, one-sixth of the subscription to be payable on call of the organization committee or of the Federal Reserve Board, one-sixth within three months and one-sixth within six months thereafter, and the remainder of the subscription, or any part thereof, shall be subject to call when deemed necessary by the Federal Reserve Board, said payments to be in gold or gold certificates.

The shareholders of every Federal reserve bank shall be held individually responsible, equally and ratably, and not one for another, for all contracts, debts, and engagements of such bank to the extent of the amount of their subscriptions to such stock at the par value thereof in addition to the amount subscribed, whether such subscriptions have been paid up in whole or in part, under the provisions of this Act.

Any national bank failing to signify its acceptance of the terms of this Act within the sixty days aforesaid, shall cease to act as a reserve agent, upon thirty days' notice, to be given within the discretion of the said organization committee or of the Federal Reserve Board.

Should any national banking association in the United States now organized fail within one year after the passage of this Act to become a member bank or fail to comply with any of the provisions of this Act applicable thereto, all of the rights, privileges, and franchises of such association granted to it under the national-bank Act, or under the provisions of this Act, shall be thereby forfeited. Any noncompliance with or violation of this Act shall, however, be determined and adjudged by any court of the United States of competent jurisdiction in a suit brought for that purpose in the district or territory in which such bank is located, under direction of the Federal Reserve Board, by the Comptroller of the Currency in his own name before the association shall be declared dissolved. In cases of such noncompliance or violation, other than the failure to become a member bank under the provisions of this Act, every director who participated in or assented to the same shall be held liable in his personal or individual capacity for all damages which

said bank, its shareholders, or any other person shall have sustained in consequence of such violation.

Such dissolution shall not take away or impair any remedy against such corporation, its stockholders or officers, for any liability or penalty which shall have been previously incurred.

Should the subscriptions by banks to the stock of said Federal reserve banks or any one or more of them be, in the judgment of the organization committee, insufficient to provide the amount of capital required therefor, then and in that event the said organization committee may, under conditions and regulations to be prescribed by it, offer to public subscription at par such an amount of stock in said Federal reserve banks, or any one or more of them, as said committee shall determine, subject to the same conditions as to payment and stock liability as provided for member banks.

No individual, copartnership, or corporation other than a member bank of its district shall be permitted to subscribe for or to hold at any time more than \$25,000 par value of stock in any Federal reserve bank. Such stock shall be known as public stock and may be transferred on the books of the Federal reserve bank by the chairman of the board of directors of such bank.

Should the total subscriptions by banks and the public to the stock of said Federal reserve banks, or any one or more of them, be, in the judgment of the organization committee, insufficient to provide the amount of capital required therefor, then and in that event the said organization committee shall allot to the United States such an amount of said stock as said committee shall determine. Said United States stock shall be paid for at par out of any money in the Treasury not otherwise appropriated, and shall be held by the Secretary of the Treasury and disposed of for the benefit of the United States in such manner, at such times, and at such price, not less than par, as the Secretary of the Treasury shall determine.

Stock not held by member banks shall not be entitled to voting power.

The Federal Reserve Board is hereby empowered to adopt and promulgate rules and regulations governing the transfers of said stock.

No Federal reserve bank shall commence business with a subscribed capital less than \$4,000,000. The organization of reserve districts and Federal reserve cities shall not be construed as changing the present status of reserve cities and central reserve cities, except in so far as this Act changes the amount of reserves that may be carried with approved reserve agents located therein. The organization committee shall have power to appoint such assistants and incur such expenses in carrying out the provisions of this Act as it shall deem necessary, and such expenses shall be payable by the Treasurer of the United States upon voucher approved by the Secretary of the Treasury, and the sum of \$100,000, or so much thereof as may be necessary, is hereby appropriated, out of any moneys in the Treasury not otherwise appropriated, for the payment of such expenses.

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BRANCH OFFICES

SEC. 3. Each Federal reserve bank shall establish branch banks within the Federal reserve district in which it is located and may do so in the district of any Federal reserve bank which may have been suspended. Such branches shall be operated by a board of directors under rules and regulations approved by the Federal Reserve Board. Directors of branch banks shall possess the same qualifications as directors of the Federal reserve banks. Four of said directors shall be selected by the reserve bank and three by the Federal Reserve Board, and they shall hold office during the pleasure, respectively, of the parent bank and the Federal Reserve Board. The reserve bank shall designate one of the directors as manager.

FEDERAL RESERVE BANKS

SEC. 4. When the organization committee shall have established Federal reserve districts as provided in section two of this Act, a certificate shall be filed with the Comptroller of the Currency showing the geographical limits of such districts and the Federal reserve city designated in each of such districts. The Comptroller of the Currency shall thereupon cause to be forwarded to each national bank located in each district, and to such other banks declared to be eligible by the organization committee which may apply therefor, an application blank in form to be approved by the organization committee, which blank shall contain a resolution to be adopted by the board of directors of each bank executing such application, authorizing a subscription to the capital stock of the Federal reserve bank organizing in that district in accordance with the provisions of this Act.

When the minimum amount of capital stock prescribed by this Act for the organization of any Federal reserve bank shall have been subscribed and allotted, the organization committee shall designate any five banks of those whose applications have been received, to execute a certificate of organization, and thereupon the banks so designated shall, under their seals, make an organization certificate which shall specifically state the name of such Federal reserve bank, the territorial extent of the district over which the operations of such Federal reserve bank are to be carried on, the city and State in which said bank is to be located, the amount of capital stock and the number of shares into which the same is divided, the name and place of doing business of each bank executing such certificate, and of all banks which have subscribed to the capital stock of such Federal reserve bank and the number of shares subscribed by each, and the fact that the certificate is made to enable those banks executing same, and all banks which have subscribed or may thereafter subscribe to the capital stock of such Federal reserve bank, to avail themselves of the advantages of this Act.

The said organization certificate shall be acknowledged before a judge of some court of record or notary public; and shall be, together with the acknowledgment thereof, authenticated by the seal of such court, or notary, transmitted to the Comptroller of the Currency, who shall file, record and carefully preserve the same in his office.

Upon the filing of such certificate with the Comptroller of the Currency as aforesaid, the said Federal reserve bank shall become a body corporate and as such, and in the name designated in such organization certificate, shall have power—

First. To adopt and use a corporate seal.

Second. To have succession for a period of twenty years from its organization unless it is sooner dissolved by an Act of Congress, or unless its franchise becomes forfeited by some violation of law.

Third. To make contracts.

Fourth. To sue and be sued, complain and defend, in any court of law or equity.

Fifth. To appoint by its board of directors, such officers and employees as are not otherwise provided for in this Act, to define their duties, require bonds of them and fix the penalty thereof, and to dismiss at pleasure such officers or employees.

Sixth. To prescribe by its board of directors, by-laws not inconsistent with law, regulating the manner in which its general business may be conducted, and the privileges granted to it by law may be exercised and enjoyed.

Seventh. To exercise by its board of directors, or duly authorized officers or agents, all powers specifically granted by the provisions of this Act and such incidental powers as shall be necessary to carry on the business of banking within the limitations prescribed by this Act.

Eighth. Upon deposit with the Treasurer of the United States of any bonds of the United States in the manner provided by existing law relating to national banks, to receive from the Comptroller of the Currency circulating notes in blank, registered and countersigned as provided by law, equal in amount to the par value of the bonds so deposited, such notes to be issued under the same conditions and provisions of law as relate to the issue of circulating notes of national banks secured by bonds of the United States bearing the circulating privilege, except that the issue of such notes shall not be limited to the capital stock of such Federal reserve bank.

But no Federal reserve bank shall transact any business except such as is incidental and necessarily preliminary to its organization until it has been authorized by the Comptroller of the Currency to commence business under the provisions of this Act.

Every Federal reserve bank shall be conducted under the supervision and control of a board of directors.

The board of directors shall perform the duties usually appertaining to the office of directors of banking associations and all such duties as are prescribed by law.

Said board shall administer the affairs of said bank fairly and impartially and without discrimination in favor of or against any member bank or banks and shall, subject to the provisions of law and the orders of the Federal Reserve Board, extend to each member bank such discounts, advancements and accommodations as may be safely and reasonably made with due regard for the claims and demands of other member banks.

Such board of directors shall be selected as hereinafter specified

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and shall consist of nine members, holding office for three years, and divided into three classes, designated as classes A, B, and C.

Class A shall consist of three members, who shall be chosen by and be representative of the stock-holding banks.

Class B shall consist of three members, who at the time of their election shall be actively engaged in their district in commerce, agriculture or some other industrial pursuit.

Class C shall consist of three members who shall be designated by the Federal Reserve Board. When the necessary subscriptions to the capital stock have been obtained for the organization of any Federal reserve bank, the Federal Reserve Board shall appoint the class C directors and shall designate one of such directors as chairman of the board to be selected. Pending the designation of such chairman, the organization committee shall exercise the powers and duties appertaining to the office of chairman in the organization of such Federal reserve bank.

No Senator or Representative in Congress shall be a member of the Federal Reserve Board or an officer or a director of a Federal reserve bank.

No director of class B shall be an officer, director, or employee of any bank.

No director of class C shall be an officer, director, employee, or stockholder of any bank.

Directors of class A and class B shall be chosen in the following manner:

The chairman of the board of directors of the Federal reserve bank of the district in which the bank is situated or, pending the appointment of such chairman, the organization committee shall classify the member banks of the district into three general groups or divisions. Each group shall contain as nearly as may be one-third of the aggregate number of the member banks of the district and shall consist, as nearly as may be, of banks of similar capitalization. The groups shall be designated by number by the chairman.

At a regularly called meeting of the board of directors of each member bank in the district it shall elect by ballot a district reserve elector and shall certify his name to the chairman of the board of directors of the Federal reserve bank of the district. The chairman shall make lists of the district reserve electors thus named by banks in each of the aforesaid three groups and shall transmit one list to each elector in each group.

Each member bank shall be permitted to nominate to the chairman one candidate for director of class A and one candidate for director of class B. The candidates so nominated shall be listed by the chairman, indicating by whom nominated, and a copy of said list shall, within fifteen days after its completion, be furnished by the chairman to each elector.

Every elector shall, within fifteen days after the receipt of the said list, certify to the chairman his first, second, and other choices of a director of class A and class B, respectively, upon a preferential ballot, on a form furnished by the chairman of the board of directors of the Federal reserve bank of the district. Each elector shall make a cross opposite the name of the first, second, and other

choices for a director of class A and for a director of class B, but shall not vote more than one choice for any one candidate.

Any candidate having a majority of all votes cast in the column of first choice shall be declared elected. If no candidate have a majority of all the votes in the first column, then there shall be added together the votes cast by the electors for such candidates in the second column and the votes cast for the several candidates in the first column. If any candidate then have a majority of the electors voting, by adding together the first and second choices, he shall be declared elected. If no candidate have a majority of electors voting when the first and second choices shall have been added, then the votes cast in the third column for other choices shall be added together in like manner, and the candidate then having the highest number of votes shall be declared elected. An immediate report of election shall be declared.

Class C directors shall be appointed by the Federal Reserve Board. They shall have been for at least two years residents of the district for which they are appointed, one of whom shall be designated by said board as chairman of the board of directors of the Federal reserve bank and as "Federal reserve agent." He shall be a person of tested banking experience; and in addition to his duties as chairman of the board of directors of the Federal reserve bank he shall be required to maintain under regulations to be established by the Federal Reserve Board a local office of said board on the premises of the Federal reserve bank. He shall make regular reports to the Federal Reserve Board, and shall act as its official representative for the performance of the functions conferred upon it by this Act. He shall receive an annual compensation to be fixed by the Federal Reserve Board and paid monthly by the Federal reserve bank to which he is designated. One of the directors of class C, who shall be a person of tested banking experience, shall be appointed by the Federal Reserve Board as deputy chairman and deputy Federal reserve agent to exercise the powers of the chairman of the board and Federal reserve agent in case of absence or disability of his principal.

Directors of Federal reserve banks shall receive, in addition to any compensation otherwise provided, a reasonable allowance for necessary expenses in attending meetings of their respective boards, which amount shall be paid by the respective Federal reserve banks. Any compensation that may be provided by boards of directors of Federal reserve banks for directors, officers or employees shall be subject to the approval of the Federal Reserve Board.

The Reserve Bank Organization Committee may, in organizing Federal reserve banks, call such meetings of bank directors in the several districts as may be necessary to carry out the purposes of this Act, and may exercise the functions herein conferred upon the chairman of the board of directors of each Federal reserve bank pending the complete organization of such bank.

At the first meeting of the full board of directors of each Federal reserve bank, it shall be the duty of the directors of classes A, B and C, respectively, to designate one of the members of each class whose term of office shall expire in one year from the first

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of January nearest to date of such meeting, one whose term of office shall expire at the end of two years from said date, and one whose term of office shall expire at the end of three years from said date. Thereafter every director of a Federal reserve bank chosen as hereinbefore provided shall hold office for a term of three years. Vacancies that may occur in the several classes of directors of Federal reserve banks may be filled in the manner provided for the original selection of such directors, such appointees to hold office for the unexpired terms of their predecessors.

STOCK ISSUES; INCREASE AND DECREASE OF CAPITAL

SEC. 5. The capital stock of each Federal reserve bank shall be divided into shares of \$100 each. The outstanding capital stock shall be increased from time to time as member banks increase their capital stock and surplus or as additional banks become members, and may be decreased as member banks reduce their capital stock or surplus or cease to be members. Shares of the capital stock of Federal reserve banks owned by member banks shall not be transferred or hypothecated. When a member bank increases its capital stock or surplus, it shall thereupon subscribe for an additional amount of capital stock of the Federal reserve bank of its district equal to six per centum of the said increase, one-half of said subscription to be paid in the manner hereinbefore provided for original subscription, and one-half subject to call of the Federal Reserve Board. A bank applying for stock in a Federal reserve bank at any time after the organization thereof must subscribe for an amount of the capital stock of the Federal reserve bank equal to six per centum of the paid-up capital stock and surplus of said applicant bank, paying therefor its par value plus one-half of one per centum a month from the period of the last dividend. When the capital stock of any Federal reserve bank shall have been increased either on account of the increase of capital stock of member banks or on account of the increase in the number of member banks, the board of directors shall cause to be executed a certificate to the Comptroller of the Currency showing the increase in capital stock, the amount paid in, and by whom paid. When a member bank reduces its capital stock it shall surrender a proportionate amount of its holdings in the capital of said Federal reserve bank, and when a member bank voluntarily liquidates it shall surrender all of its holdings of the capital stock of said Federal reserve bank and be released from its stock subscription not previously called. In either case the shares surrendered shall be cancelled and the member bank shall receive in payment therefor, under regulations to be prescribed by the Federal Reserve Board, a sum equal to its cash-paid subscriptions on the shares surrendered and one-half of one per centum a month from the period of the last dividend, not to exceed the book value thereof, less any liability of such member bank to the Federal reserve bank.

SEC. 6. If any member bank shall be declared insolvent and a receiver appointed therefor, the stock held by it in said Federal reserve bank shall be cancelled, without impairment of its liability,

and all cash-paid subscriptions on said stock, with one-half of one per centum per month from the period of last dividend, not to exceed the book value thereof, shall be first applied to all debts of the insolvent member bank to the Federal reserve bank, and the balance, if any, shall be paid to the receiver of the insolvent bank. Whenever the capital stock of a Federal reserve bank is reduced, either on account of a reduction in capital stock of any member bank or of the liquidation or insolvency of such bank, the board of directors shall cause to be executed a certificate to the Comptroller of the Currency showing such reduction of capital stock and the amount repaid to such bank.

DIVISION OF EARNINGS

SEC. 7. After all necessary expenses of a Federal reserve bank have been paid or provided for, the stockholders shall be entitled to receive an annual dividend of six per centum on the paid-in capital stock, which dividend shall be cumulative. After the aforesaid dividend claims have been fully met, all the net earnings shall be paid to the United States as a franchise tax, except that one-half of such net earnings shall be paid into a surplus fund until it shall amount to forty per centum of the paid-in capital stock of such bank.

The net earnings derived by the United States from Federal reserve banks shall, in the discretion of the Secretary, be used to supplement the gold reserve held against outstanding United States notes, or shall be applied to the reduction of the outstanding bonded indebtedness of the United States under regulations to be prescribed by the Secretary of the Treasury. Should a Federal reserve bank be dissolved or go into liquidation, any surplus remaining, after the payment of all debts, dividend requirements as hereinbefore provided, and the par value of the stock, shall be paid to and become the property of the United States and shall be similarly applied.

Federal reserve banks, including the capital stock and surplus therein, and the income derived therefrom shall be exempt from Federal, State, and local taxation, except taxes upon real estate.

SEC. 8. Section fifty-one hundred and fifty-four, United States Revised Statutes, is hereby amended to read as follows:

Any bank incorporated by special law of any State or of the United States or organized under the general laws of any State or of the United States and having an unimpaired capital sufficient to entitle it to become a national banking association under the provisions of the existing laws may, by the vote of the shareholders owning not less than fifty-one per centum of the capital stock of such bank or banking association, with the approval of the Comptroller of the Currency be converted into a national banking association, with any name approved by the Comptroller of the Currency:

Provided, however, That said conversion shall not be in contravention of the State law. In such case the articles of association and organization certificate may be executed by a majority of the directors of the bank or banking institution, and the certificate shall

declare that the owners of fifty-one per centum of the capital stock have authorized the directors to make such certificate and to change or convert the bank or banking institution into a national association. A majority of the directors, after executing the articles of association and the organization certificate, shall have power to execute all other papers and to do whatever may be required to make its organization perfect and complete as a national association. The shares of any such bank may continue to be for the same amount each as they were before the conversion, and the directors may continue to be directors of the association until others are elected or appointed in accordance with the provisions of the statutes of the United States. When the Comptroller has given to such bank or banking association a certificate that the provisions of this Act have been complied with, such bank or banking association, and all its stockholders, officers, and employees, shall have the same powers and privileges, and shall be subject to the same duties, liabilities, and regulations, in all respects, as shall have been prescribed by the Federal Reserve Act and by the national banking Act for associations originally organized as national banking associations.

STATE BANKS AS MEMBERS

SEC. 9. Any bank incorporated by special law of any State, or organized under the general laws of any State or of the United States, may make application to the reserve bank organization committee, pending organization, and thereafter to the Federal Reserve Board for the right to subscribe to the stock of the Federal reserve bank organized or to be organized within the Federal reserve district where the applicant is located. The organization committee or the Federal Reserve Board, under such rules and regulations as it may prescribe, subject to the provisions of this section, may permit the applying bank to become a stockholder in the Federal reserve bank of the district in which the applying bank is located. Whenever the organization committee or the Federal Reserve Board shall permit the applying bank to become a stockholder in the Federal reserve bank of the district, stock shall be issued and paid for under the rules and regulations in this Act provided for national banks which become stockholders in Federal reserve banks.

The organization committee or the Federal Reserve Board shall establish by-laws for the general government of its conduct in acting upon applications made by the State banks and banking associations and trust companies for stock ownership in Federal reserve banks. Such by-laws shall require applying banks not organized under Federal law to comply with the reserve and capital requirements and to submit to the examination and regulations prescribed by the organization committee or by the Federal Reserve Board. No applying bank shall be admitted to membership in a Federal reserve bank unless it possesses a paid-up unimpaired capital sufficient to entitle it to become a national banking association in the place where it is situated, under the provisions of the national banking Act.

Any bank becoming a member of a Federal reserve bank under the provisions of this section shall, in addition to the regulations and restrictions hereinbefore provided, be required to conform to the

provisions of law imposed on the national banks respecting the limitation of liability which may be incurred by any person, firm, or corporation to such banks, the prohibition against making purchase of or loans on stock of such banks, and the withdrawal or impairment of capital, or the payment of unearned dividends, and to such rules and regulations as the Federal Reserve Board may, in pursuance thereof, prescribe.

Such banks, and the officers, agents, and employees thereof, shall also be subject to the provisions of and to the penalties prescribed by sections fifty-one hundred and ninety-eight, fifty-two hundred, fifty-two hundred and one, and fifty-two hundred and eight, and fifty-two hundred and nine of the Revised Statutes. The member banks shall also be required to make reports of the conditions and of the payments of dividends to the Comptroller, as provided in sections fifty-two hundred and eleven and fifty-two hundred and twelve of the Revised Statutes, and shall be subject to the penalties prescribed by section fifty-two hundred and thirteen for the failure to make such report.

If at any time it shall appear to the Federal Reserve Board that a member bank has failed to comply with the provisions of this section or the regulations of the Federal Reserve Board, it shall be within the power of the said board, after hearing, to require such bank to surrender its stock in the Federal reserve bank; upon such surrender the Federal reserve bank shall pay the cash-paid subscriptions to the said stock with interest at the rate of one-half of one per centum per month, computed from the last dividend, if earned, not to exceed the book value thereof, less any liability to said Federal reserve bank, except the subscription liability not previously called, which shall be cancelled, and said Federal reserve bank shall, upon notice from the Federal Reserve Board, be required to suspend said bank from further privileges of membership, and shall within thirty days of such notice cancel and retire its stock and make payment therefor in the manner herein provided. The Federal Reserve Board may restore membership upon due proof of compliance with the conditions imposed by this section.

FEDERAL RESERVE BOARD

SEC. 10. A Federal Reserve Board is hereby created which shall consist of seven members, including the Secretary of the Treasury and the Comptroller of the Currency, who shall be members ex-officio, and five members appointed by the President of the United States, by and with the advice and consent of the Senate. In selecting the five appointive members of the Federal Reserve Board, not more than one of whom shall be selected from any one Federal reserve district, the President shall have due regard to a fair representation of the different commercial, industrial and geographical divisions of the country. The five members of the Federal Reserve Board appointed by the President and confirmed as aforesaid shall devote their entire time to the business of the Federal Reserve Board and shall each receive an annual salary of \$12,000, payable monthly together with actual necessary traveling expenses, and the Comptroller of the Currency, as ex-officio member of the Federal

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Reserve Board, shall, in addition to the salary now paid him as Comptroller of the Currency, receive the sum of \$7,000 annually for his services as a member of said board.

The members of said board, the Secretary of the Treasury, the Assistant Secretaries of the Treasury, and the Comptroller of the Currency shall be ineligible during the time they are in office and for two years thereafter to hold any office, position, or employment in any member bank. Of the five members thus appointed by the President at least two shall be persons experienced in banking or finance. One shall be designated by the President to serve for two, one for four, one for six, one for eight, and one for ten years, and thereafter each member so appointed shall serve for a term of ten years unless sooner removed for cause by the President. Of the five persons thus appointed, one shall be designated by the President as governor and one as vice-governor of the Federal Reserve Board. The governor of the Federal Reserve Board, subject to its supervision, shall be the active executive officer. The Secretary of the Treasury may assign offices in the Department of the Treasury for the use of the Federal Reserve Board. Each member of the Federal Reserve Board shall within fifteen days after notice of appointment make and subscribe to the oath of office.

The Federal Reserve Board shall have power to levy semi-annually upon the Federal reserve banks, in proportion to their capital stock and surplus, an assessment sufficient to pay its estimated expenses and the salaries of its members and employees for the half year succeeding the levying of such assessment, together with any deficit carried forward from the preceding half year.

The first meeting of the Federal Reserve Board shall be held in Washington, District of Columbia, as soon as may be after the passage of this Act, at a date to be fixed by the Reserve Bank Organization Committee. The Secretary of the Treasury shall be ex-officio chairman of the Federal Reserve Board. No member of the Federal Reserve Board shall be an officer or director of any bank, banking institution, trust company, or Federal reserve bank nor hold stock in any bank, banking institution, or trust company; and before entering upon his duties as a member of the Federal Reserve Board he shall certify under oath to the Secretary of the Treasury that he has complied with this requirement. Whenever a vacancy shall occur, other than by expiration of term, among the five members of the Federal Reserve Board appointed by the President, as above provided, a successor shall be appointed by the President, with the advice and consent of the Senate, to fill such vacancy, and when appointed he shall hold office for the unexpired term of the member whose place he is selected to fill.

The President shall have power to fill all vacancies that may happen on the Federal Reserve Board during the recess of the Senate, by granting commissions which shall expire thirty days after the next session of the Senate convenes.

Nothing in this Act contained shall be construed as taking away any powers heretofore vested by law in the Secretary of the Treasury which relate to the supervision, management, and control of the Treasury Department and bureaus under such department, and

wherever any power vested by this Act in the Federal Reserve Board or the Federal reserve agent appears to conflict with the powers of the Secretary of the Treasury, such powers shall be exercised subject to the supervision and control of the Secretary.

The Federal Reserve Board shall annually make a full report of its operations to the Speaker of the House of Representatives, who shall cause the same to be printed for the information of the Congress.

Section three hundred and twenty-four of the Revised Statutes of the United States shall be amended so as to read as follows: There shall be in the Department of the Treasury a bureau charged with the execution of all laws passed by Congress relating to the issue and regulation of national currency secured by United States bonds and, under the general supervision of the Federal Reserve Board, of all Federal reserve notes, the chief officer of which bureau shall be called the Comptroller of the Currency and shall perform his duties under the general directions of the Secretary of the Treasury.

Sec. 11. The Federal Reserve Board shall be authorized and empowered:

(a) To examine at its discretion the accounts, books and affairs of each Federal reserve bank and of each member bank and to require such statements and reports as it may deem necessary. The said board shall publish once each week a statement showing the condition of each Federal reserve bank and a consolidated statement for all Federal reserve banks. Such statements shall show in detail the assets and liabilities of the Federal reserve banks, single and combined, and shall furnish full information regarding the character of the money held as reserve and the amount, nature and maturities of the paper and other investments owned or held by Federal reserve banks.

(b) To permit, or, on the affirmative vote of at least five members of the Reserve Board to require Federal reserve banks to rediscount the discounted paper of other Federal reserve banks at rates of interest to be fixed by the Federal Reserve Board.

(c) To suspend, for a period not exceeding thirty days, and from time to time to renew such suspension for periods not exceeding fifteen days, any reserve requirement specified in this Act: *Provided*, That it shall establish a graduated tax upon the amounts by which the reserve requirements of this Act may be permitted to fall below the level hereinafter specified: *And provided further*, That when the gold reserve held against Federal reserve notes falls below forty per centum, the Federal Reserve Board shall establish a graduated tax of not more than one per centum per annum upon such deficiency until the reserves fall to thirty-two and one-half per centum, and when said reserve falls below thirty-two and one-half per centum, a tax at the rate increasingly of not less than one and one-half per centum per annum upon each two and one-half per centum or fraction thereof that such reserve falls below thirty-two and one-half per centum. The tax shall be paid by the reserve bank, but the reserve bank shall add an amount equal to said tax to the rates of interest and discount fixed by the Federal Reserve Board.

(d) To supervise and regulate through the bureau under the

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charge of the Comptroller of the Currency the issue and retirement of Federal reserve notes, and to prescribe rules and regulations under which such notes may be delivered by the Comptroller to the Federal reserve agents applying therefor.

(e) To add to the number of cities classified as reserve and central reserve cities under existing law in which national banking associations are subject to the reserve requirements set forth in section twenty of this Act; or to reclassify existing reserve and central reserve cities or to terminate their designation as such.

(f) To suspend or remove any officer or director of any Federal reserve bank, the cause of such removal to be forthwith communicated in writing by the Federal Reserve Board to the removed officer or director and to said bank.

(g) To require the writing off of doubtful or worthless assets upon the books and balance sheets of Federal reserve banks.

(h) To suspend, for the violation of any of the provisions of this Act, the operations of any Federal reserve bank, to take possession thereof, administer the same during the period of suspension, and, when deemed advisable, to liquidate or reorganize such bank.

(i) To require bonds of Federal reserve agents, to make regulations for the safeguarding of all collateral, bonds, Federal reserve notes, money or property of any kind deposited in the hands of such agents, and said board shall perform the duties, functions, or services specified in this Act and make all rules and regulations necessary to enable said board effectively to perform the same.

(j) To exercise general supervision over said Federal reserve banks.

(k) To grant by special permit to national banks applying therefor, when not in contravention of State or local law, the right to act as trustee, executor, administrator, or registrar of stocks and bonds under such rules and regulations as the said board may prescribe.

(l) To employ such attorneys, experts, assistants, clerks, or other employees as may be deemed necessary to conduct the business of the board. All salaries and fees shall be fixed in advance by said board and shall be paid in the same manner as the salaries of the members of said board. All such attorneys, experts, assistants, clerks, and other employees shall be appointed without regard to the provisions of the Act of January sixteenth, eighteen hundred and eighty-three (volume twenty-two, United States Statutes at Large, page four hundred and three), and amendments thereto, or any rule or regulation made in pursuance thereof: *Provided*, That nothing herein shall prevent the President from placing said employees in the classified service.

FEDERAL ADVISORY COUNCIL

SEC. 12. There is hereby created a Federal Advisory Council, which shall consist of as many members as there are Federal reserve districts. Each Federal reserve bank by its board of directors shall annually select from its own Federal reserve district one member of said council, who shall receive such compensation and allowances as may be fixed by his board of directors subject to the approval of the

Federal Reserve Board. The meetings of said advisory council shall be held at Washington, District of Columbia, at least four times each year, and oftener if called by the Federal Reserve Board. The council may, in addition to the meetings above provided for, hold such other meetings in Washington, District of Columbia, or elsewhere, as it may deem necessary, may select its own officers and adopt its own methods of procedure, and a majority of its members shall constitute a quorum for the transaction of business. Vacancies in the council shall be filled by the respective reserve banks, and members selected to fill vacancies shall serve for the unexpired term.

The Federal Advisory Council shall have power, by itself or through its officers, (1) to confer directly with the Federal Reserve Board on general business conditions; (2) to make oral or written representations concerning matters within the jurisdiction of said board; (3) to call for information and to make recommendations in regard to discount rates, rediscount business, note issues, reserve conditions in the various districts, the purchase and sale of gold or securities by reserve banks, open-market operations by said banks, and the general affairs of the reserve banking system.

POWERS OF FEDERAL RESERVE BANKS

SEC. 13. Any Federal reserve bank may receive from any of its member banks, and from the United States, deposits of current funds in lawful money, national-bank notes, Federal reserve notes, or checks and drafts upon solvent member banks, payable upon presentation; or, solely for exchange purposes, may receive from other Federal reserve banks deposits of current funds in lawful money, national-bank notes, or checks and drafts upon solvent member or other Federal reserve banks, payable upon presentation.

Upon the indorsement of any of its member banks, with a waiver of demand, notice and protest by such bank, any Federal reserve bank may discount notes, drafts, and bills of exchange arising out of actual commercial transactions; that is, notes, drafts, and bills of exchange issued or drawn for agricultural, industrial, or commercial purposes, or the proceeds of which have been used, or are to be used, for such purposes, the Federal Reserve Board to have the right to determine or define the character of the paper thus eligible for discount, within the meaning of this Act. Nothing in this Act contained shall be construed to prohibit such notes, drafts, and bills of exchange, secured by staple agricultural products, or other goods, wares, or merchandise from being eligible for such discount; but such definition shall not include notes, drafts, or bills covering merely investments or issued or drawn for the purpose of carrying or trading in stocks, bonds, or other investment securities, except bonds and notes of the Government of the United States. Notes, drafts, and bills admitted to discount under the terms of this paragraph must have a maturity at the time of discount of not more than ninety days: *Provided*, That notes, drafts, and bills drawn or issued for agricultural purposes or based on live stock and having a maturity not exceeding six months may be discounted in an amount to be limited to a percentage of the capital of the Federal reserve bank, to be ascertained and fixed by the Federal Reserve Board.

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Any Federal reserve bank may discount acceptances which are based on the importation or exportation of goods and which have a maturity at time of discount of not more than three months, and indorsed by at least one member bank. The amount of acceptances so discounted shall at no time exceed one-half the paid-up capital stock and surplus of the bank for which the rediscounts are made.

The aggregate of such notes and bills bearing the signature or indorsement of any one person, company, firm, or corporation rediscounted for any one bank shall at no time exceed ten per centum of the unimpaired capital and surplus of said bank; but this restriction shall not apply to the discount of bills of exchange drawn in good faith against actually existing values.

Any member bank may accept drafts or bills of exchange drawn upon it and growing out of transactions involving the importation or exportation of goods having not more than six months' sight to run; but no bank shall accept such bills to an amount equal at any time in the aggregate to more than one-half its paid-up capital stock and surplus.

Section fifty-two hundred and two of the Revised Statutes of the United States is hereby amended so as to read as follows: No national banking association shall at any time be indebted, or in any way liable, to an amount exceeding the amount of its capital stock at such time actually paid in and remaining undiminished by losses or otherwise, except on account of demands of the nature following:

First. Notes of circulation.

Second. Moneys deposited with or collected by the association.

Third. Bills of exchange or drafts drawn against money actually on deposit to the credit of the association, or due thereto.

Fourth. Liabilities to the stockholders of the association for dividends and reserve profits.

Fifth. Liabilities incurred under the provisions of the Federal Reserve Act.

The rediscount by any Federal reserve bank of any bills receivable and of domestic and foreign bills of exchange, and of acceptances authorized by this Act, shall be subject to such restrictions, limitations, and regulations as may be imposed by the Federal Reserve Board.

OPEN-MARKET OPERATIONS

SEC. 14. Any Federal reserve bank may, under rules and regulations prescribed by the Federal Reserve Board, purchase and sell in the open market, at home or abroad, either from or to domestic or foreign banks, firms, corporations, or individuals, cable transfers and bankers' acceptances and bills of exchange of the kinds and maturities by this Act made eligible for rediscount, with or without the indorsements of a member bank.

Every Federal reserve bank shall have power:

(a) To deal in gold coin and bullion at home or abroad, to make loans thereon, exchange Federal reserve notes for gold, gold coin, or gold certificates, and to contract for loans of gold coin or bullion, giving therefor, when necessary, acceptable security, includ-

ing the hypothecation of United States bonds or other securities which Federal reserve banks are authorized to hold;

(b) To buy and sell, at home or abroad, bonds and notes of the United States, and bills, notes, revenue bonds, and warrants with a maturity from date of purchase of not exceeding six months, issued in anticipation of the collection of taxes or in anticipation of the receipt of assured revenues by any State, county, district, political subdivision, or municipality in the continental United States, including irrigation, drainage and reclamation districts, such purchases to be made in accordance with rules and regulations prescribed by the Federal Reserve Board;

(c) To purchase from member banks and to sell, with or without its indorsement, bills of exchange arising out of commercial transactions, as hereinbefore defined;

(d) To establish from time to time, subject to review and determination of the Federal Reserve Board, rates of discount to be charged by the Federal reserve bank for each class of paper, which shall be fixed with a view of accommodating commerce and business;

(e) To establish accounts with other Federal reserve banks for exchange purposes and, with the consent of the Federal Reserve Board, to open and maintain banking accounts in foreign countries, appoint correspondents, and establish agencies in such countries wheresoever it may deem best for the purpose of purchasing, selling, and collecting bills of exchange, and to buy and sell with or without its indorsement, through such correspondents or agencies, bills of exchange arising out of actual commercial transactions which have not more than ninety days to run and which bear the signature of two or more responsible parties.

GOVERNMENT DEPOSITS

SEC. 15. The moneys held in the general fund of the Treasury, except the five per centum fund for the redemption of outstanding national-bank notes and the funds provided in this Act for the redemption of Federal reserve notes may, upon the direction of the Secretary of the Treasury, be deposited in Federal reserve banks, which banks, when required by the Secretary of the Treasury, shall act as fiscal agents of the United States; and the revenues of the Government or any part thereof may be deposited in such banks, and disbursements may be made by checks drawn against such deposits.

No public funds of the Philippine Islands, or of the postal savings, or any Government funds, shall be deposited in the continental United States in any bank not belonging to the system established by this Act: *Provided, however,* That nothing in this Act shall be construed to deny the right of the Secretary of the Treasury to use member banks as depositaries.

NOTE ISSUES

SEC. 16. Federal reserve notes, to be issued at the discretion of the Federal Reserve Board for the purpose of making advances to Federal reserve banks through the Federal reserve agents as hereinafter set forth and for no other purpose, are hereby authorized.

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The said notes shall be obligations of the United States and shall be receivable by all national and member banks and Federal reserve banks and for all taxes, customs, and other public dues. They shall be redeemed in gold on demand at the Treasury Department of the United States, in the city of Washington, District of Columbia, or in gold or lawful money at any Federal reserve bank.

Any Federal reserve bank may make application to the local Federal reserve agent for such amount of the Federal reserve notes hereinbefore provided for as it may require. Such application shall be accompanied with a tender to the local Federal reserve agent of collateral in amount equal to the sum of the Federal reserve notes thus applied for and issued pursuant to such application. The collateral security thus offered shall be notes and bills, accepted for rediscount under the provisions of section thirteen of this Act, and the Federal reserve agent shall each day notify the Federal Reserve Board of all issues and withdrawals of Federal reserve notes to and by the Federal reserve bank to which he is accredited. The said Federal Reserve Board may at any time call upon a Federal reserve bank for additional security to protect the Federal reserve notes issued to it.

Every Federal reserve bank shall maintain reserves in gold or lawful money of not less than thirty-five per centum against its deposits and reserves in gold of not less than forty per centum against its Federal reserve notes in actual circulation, and not offset by gold or lawful money deposited with the Federal reserve agent. Notes so paid out shall bear upon their faces a distinctive letter and serial number, which shall be assigned by the Federal Reserve Board to each Federal reserve bank. Whenever Federal reserve notes issued through one Federal reserve bank shall be received by another Federal reserve bank they shall be promptly returned for credit or redemption to the Federal reserve bank through which they were originally issued. No Federal reserve bank shall pay out notes issued through another under penalty of a tax of ten per centum upon the face value of notes so paid out. Notes presented for redemption at the Treasury of the United States shall be paid out of the redemption fund and returned to the Federal reserve banks through which they were originally issued, and thereupon such Federal reserve bank shall, upon demand of the Secretary of the Treasury, reimburse such redemption fund in lawful money or, if such Federal reserve notes have been redeemed by the Treasurer in gold or gold certificates, then such funds shall be reimbursed to the extent deemed necessary by the Secretary of the Treasury in gold or gold certificates, and such Federal reserve bank shall, so long as any of its Federal reserve notes remain outstanding, maintain with the Treasurer in gold an amount sufficient in the judgment of the Secretary to provide for all redemptions to be made by the Treasurer. Federal reserve notes received by the Treasury, otherwise than for redemption, may be exchanged for gold out of the redemption fund hereinafter provided and returned to the reserve bank through which they were originally issued, or they may be returned to such bank for the credit of the United States. Federal reserve notes unfit for circulation shall be returned by the Federal reserve agents to the Comptroller of the Currency for cancellation and destruction.

The Federal Reserve Board shall require each Federal reserve bank to maintain on deposit in the Treasury of the United States a sum in gold sufficient in the judgment of the Secretary of the Treasury for the redemption of the Federal reserve notes issued to such bank, but in no event less than five per centum; but such deposit of gold shall be counted and included as part of the forty per centum reserve hereinbefore required. The board shall have the right, acting through the Federal reserve agent, to grant in whole or in part or to reject entirely the application of any Federal reserve bank for Federal reserve notes; but to the extent that such application may be granted the Federal Reserve Board shall, through its local Federal reserve agent, supply Federal reserve notes to the bank so applying, and such bank shall be charged with the amount of such notes and shall pay such rate of interest on said amount as may be established by the Federal Reserve Board, and the amount of such Federal reserve notes so issued to any such bank shall, upon delivery, together with such notes of such Federal reserve bank as may be issued under section eighteen of this Act upon security of United States two per centum Government bonds, become a first and paramount lien on all the assets of such bank.

Any Federal reserve bank may at any time reduce its liability for outstanding Federal reserve notes by depositing, with the Federal reserve agent, its Federal reserve notes, gold, gold certificates, or lawful money of the United States. Federal reserve notes so deposited shall not be reissued, except upon compliance with the conditions of an original issue.

The Federal reserve agent shall hold such gold, gold certificates, or lawful money available exclusively for exchange for the outstanding Federal reserve notes when offered by the reserve bank of which he is a director. Upon the request of the Secretary of the Treasury the Federal Reserve Board shall require the Federal reserve agent to transmit so much of said gold to the Treasury of the United States as may be required for the exclusive purpose of the redemption of such notes.

Any Federal reserve bank may at its discretion withdraw collateral deposited with the local Federal reserve agent for the protection of its Federal reserve notes deposited with it and shall at the same time substitute therefor other like collateral of equal amount with the approval of the Federal reserve agent under regulations to be prescribed by the Federal Reserve Board.

In order to furnish suitable notes for circulation as Federal reserve notes, the Comptroller of the Currency shall, under the direction of the Secretary of the Treasury, cause plates and dies to be engraved in the best manner to guard against counterfeits and fraudulent alterations, and shall have printed therefrom and numbered such quantities of such notes of the denominations of \$5, \$10, \$20, \$50, \$100, as may be required to supply the Federal reserve banks. Such notes shall be in form and tenor as directed by the Secretary of the Treasury under the provisions of this Act and shall bear the distinctive numbers of the several Federal reserve banks through which they are issued.

When such notes have been prepared, they shall be deposited in the Treasury, or in the subtreasury or mint of the United States

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nearest the place of business of each Federal reserve bank and shall be held for the use of such bank subject to the order of the Comptroller of the Currency for their delivery, as provided by this Act.

The plates and dies to be procured by the Comptroller of the Currency for the printing of such circulating notes shall remain under his control and direction, and the expenses necessarily incurred in executing the laws relating to the procuring of such notes, and all other expenses incidental to their issue and retirement, shall be paid by the Federal reserve banks, and the Federal Reserve Board shall include in its estimate of expenses levied against the Federal reserve banks a sufficient amount to cover the expenses herein provided for.

The examination of plates, dies, bed pieces, and so forth, and regulations relating to such examination of plates, dies, and so forth, of national-bank notes provided for in section fifty-one hundred and seventy-four, Revised Statutes, is hereby extended to include notes herein provided for.

Any appropriation heretofore made out of the general funds of the Treasury for engraving plates and dies, the purchase of distinctive paper, or to cover any other expense in connection with the printing of national-bank notes or notes provided for by the Act of May thirtieth, nineteen hundred and eight, and any distinctive paper that may be on hand at the time of the passage of this Act may be used in the discretion of the Secretary for the purposes of this Act, and should the appropriations heretofore made be insufficient to meet the requirements of this Act in addition to circulating notes provided for by existing law, the Secretary is hereby authorized to use so much of any funds in the Treasury not otherwise appropriated for the purpose of furnishing the notes aforesaid: *Provided, however,* That nothing in this section contained shall be construed as exempting national banks or Federal reserve banks from their liability to reimburse the United States for any expenses incurred in printing and issuing circulating notes.

Every Federal reserve bank shall receive on deposit at par from member banks or from Federal reserve banks checks and drafts drawn upon any of its depositors, and when remitted by a Federal reserve bank, checks and drafts drawn by any depositor in any other Federal reserve bank or member bank upon funds to the credit of said depositor in said reserve bank or member bank. Nothing herein contained shall be construed as prohibiting a member bank from charging its actual expense incurred in collecting and remitting funds, or for exchange sold to its patrons. The Federal Reserve Board shall, by rule, fix the charges to be collected by the member banks from its patrons whose checks are cleared through the Federal reserve bank and the charge which may be imposed for the service of clearing or collection rendered by the Federal reserve bank.

The Federal Reserve Board shall make and promulgate from time to time regulations governing the transfer of funds and charges therefor among Federal reserve banks and their branches, and may at its discretion exercise the functions of a clearing house for such Federal reserve banks, or may designate a Federal reserve bank to exercise such functions, and may also require each such bank to exercise the functions of a clearing house for its member banks.

Sec. 17. So much of the provisions of section fifty-one hundred

and fifty-nine of the Revised Statutes of the United States, and section four of the Act of June twentieth, eighteen hundred and seventy-four, and section eight of the Act of July twelfth, eighteen hundred and eighty-two, and of any other provisions of existing statutes as require that before any national banking association shall be authorized to commence banking business it shall transfer and deliver to the Treasurer of the United States a stated amount of United States registered bonds is hereby repealed.

REFUNDING BONDS

SEC. 18. After two years from the passage of this Act, and at any time during a period of twenty years thereafter, any member bank desiring to retire the whole or any part of its circulating notes, may file with the Treasurer of the United States an application to sell for its account, at par and accrued interest, United States bonds securing circulation to be retired.

The Treasurer shall, at the end of each quarterly period, furnish the Federal Reserve Board with a list of such applications, and the Federal Reserve Board may, in its discretion, require the Federal reserve banks to purchase such bonds from the banks whose applications have been filed with the Treasurer at least ten days before the end of any quarterly period at which the Federal Reserve Board may direct the purchase to be made: *Provided*, That Federal reserve banks shall not be permitted to purchase an amount to exceed \$25,000,000 of such bonds in any one year, and which amount shall include bonds acquired under section four of this Act by the Federal reserve bank.

Provided further, That the Federal Reserve Board shall allot to each Federal reserve bank such proportion of such bonds as the capital and surplus of such bank shall bear to the aggregate capital and surplus of all the Federal reserve banks.

Upon notice from the Treasurer of the amount of bonds so sold for its account, each member bank shall duly assign and transfer, in writing, such bonds to the Federal reserve bank purchasing the same, and such Federal reserve bank shall, thereupon, deposit lawful money with the Treasurer of the United States for the purchase price of such bonds, and the Treasurer shall pay to the member bank selling such bonds any balance due after deducting a sufficient sum to redeem its outstanding notes secured by such bonds, which notes shall be cancelled and permanently retired when redeemed.

The Federal reserve banks purchasing such bonds shall be permitted to take out an amount of circulating notes equal to the par value of such bonds.

Upon the deposit with the Treasurer of the United States of bonds so purchased, or any bonds with the circulating privilege acquired under section four of this Act, any Federal reserve bank making such deposit in the manner provided by existing law, shall be entitled to receive from the Comptroller of the Currency circulating notes in blank, registered and countersigned as provided by law, equal in amount to the par value of the bonds so deposited. Such notes shall be the obligations of the Federal reserve bank procuring the same, and shall be in form prescribed by the Secretary of the

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Treasury, and to the same tenor and effect as national-bank notes now provided by law. They shall be issued and redeemed under the same terms and conditions as national-bank notes except that they shall not be limited to the amount of the capital stock of the Federal reserve bank issuing them.

Upon application of any Federal reserve bank, approved by the Federal Reserve Board, the Secretary of the Treasury may issue, in exchange for United States two per centum gold bonds bearing the circulation privilege, but against which no circulation is outstanding, one-year gold notes of the United States without the circulation privilege, to an amount not to exceed one-half of the two per centum bonds so tendered for exchange, and thirty-year three per centum gold bonds without the circulation privilege for the remainder of the two per centum bonds so tendered: *Provided*, That at the time of such exchange the Federal reserve bank obtaining such one-year gold notes shall enter into an obligation with the Secretary of the Treasury binding itself to purchase from the United States for gold at the maturity of such one-year notes, an amount equal to those delivered in exchange for such bonds, if so requested by the Secretary, and at each maturity of one-year notes so purchased by such Federal reserve bank, to purchase from the United States such an amount of one-year notes as the Secretary may tender to such bank, not to exceed the amount issued to such bank in the first instance, in exchange for the two per centum United States gold bonds; said obligation to purchase at maturity such notes shall continue in force for a period not to exceed thirty years.

For the purpose of making the exchange herein provided for, the Secretary of the Treasury is authorized to issue at par Treasury notes in coupon or registered form as he may prescribe in denominations of one hundred dollars, or any multiple thereof, bearing interest at the rate of three per centum per annum, payable quarterly, such Treasury notes to be payable not more than one year from the date of their issue in gold coin of the present standard value, and to be exempt as to principal and interest from the payment of all taxes and duties of the United States except as provided by this Act, as well as from taxes in any form by or under State, municipal, or local authorities. And for the same purpose, the Secretary is authorized and empowered to issue United States gold bonds at par, bearing three per centum interest payable thirty years from date of issue, such bonds to be of the same general tenor and effect and to be issued under the same general terms and conditions as the United States three per centum bonds without the circulation privilege now issued and outstanding.

Upon application of any Federal reserve bank, approved by the Federal Reserve Board, the Secretary may issue at par such three per centum bonds in exchange for the one-year gold notes herein provided for.

BANK RESERVES

SEC. 19. Demand deposits within the meaning of this Act shall comprise all deposits payable within thirty days, and time deposits shall comprise all deposits payable after thirty days, and all savings accounts and certificates of deposit which are subject to not less than thirty days' notice before payment.

When the Secretary of the Treasury shall have officially announced, in such manner as he may elect, the establishment of a Federal reserve bank in any district, every subscribing member bank shall establish and maintain reserves as follows:

(a) A bank not in a reserve or central reserve city as now or hereafter defined shall hold and maintain reserves equal to twelve per centum of the aggregate amount of its demand deposits and five per centum of its time deposits, as follows:

In its vaults for a period of thirty-six months after said date five-twelfths thereof and permanently thereafter four-twelfths.

In the Federal reserve bank of its district, for a period of twelve months after said date, two-twelfths, and for each succeeding six months an additional one-twelfth, until five-twelfths have been so deposited, which shall be the amount permanently required.

For a period of thirty-six months after said date the balance of the reserves may be held in its own vaults, or in the Federal reserve bank, or in national banks in reserve or central reserve cities as now defined by law.

After said thirty-six months' period said reserves, other than those hereinbefore required to be held in the vaults of the member bank and in the Federal reserve bank, shall be held in the vaults of the member bank or in the Federal reserve bank, or in both, at the option of the member bank.

(b) A bank in a reserve city, as now or hereafter defined, shall hold and maintain reserves equal to fifteen per centum of the aggregate amount of its demand deposits and five per centum of its time deposits, as follows:

In its vaults for a period of thirty-six months after said date six-fifteenths thereof, and permanently thereafter five-fifteenths.

In the Federal reserve bank of its district for a period of twelve months after the date aforesaid at least three-fifteenths, and for each succeeding six months an additional one-fifteenth, until six-fifteenths have been so deposited, which shall be the amount permanently required.

For a period of thirty-six months after said date the balance of the reserves may be held in its own vaults, or in the Federal reserve bank, or in national banks in reserve or central reserve cities as now defined by law.

After said thirty-six months' period all of said reserves, except those hereinbefore required to be held permanently in the vaults of the member bank and in the Federal reserve bank, shall be held in its vaults or in the Federal reserve bank, or in both, at the option of the member bank.

(c) A bank in a central reserve city, as now or hereafter defined, shall hold and maintain a reserve equal to eighteen per centum of the aggregate amount of its demand deposits and five per centum of its time deposits, as follows:

In its vaults six-eighteenhs thereof.

In the Federal reserve bank seven-eighteenhs.

The balance of said reserves shall be held in its own vaults or in the Federal reserve bank, at its option.

Any Federal reserve bank may receive from the member banks as reserves, not exceeding one-half of each installment, eligible

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paper as described in section fourteen properly indorsed and acceptable to the said reserve bank.

If a State bank or trust company is required by the law of its State to keep its reserves either in its own vaults or with another State bank or trust company, such reserve deposits so kept in such State bank or trust company shall be construed, within the meaning of this section, as if they were reserve deposits in a national bank in a reserve or central reserve city for a period of three years after the Secretary of the Treasury shall have officially announced the establishment of a Federal reserve bank in the district in which such State bank or trust company is situate. Except as thus provided, no member bank shall keep on deposit with any nonmember bank a sum in excess of ten per centum of its own paid-up capital and surplus. No member bank shall act as the medium or agent of a nonmember bank in applying for or receiving discounts from a Federal reserve bank under the provisions of this Act except by permission of the Federal Reserve Board.

The reserve carried by a member bank with a Federal reserve bank may, under the regulations and subject to such penalties as may be prescribed by the Federal Reserve Board, be checked against and withdrawn by such member bank for the purpose of meeting existing liabilities: *Provided, However,* That no bank shall at any time make new loans or shall pay any dividends unless and until the total reserve required by law is fully restored.

In estimating the reserves required by this Act, the net balance of amounts due to and from other banks shall be taken as the basis for ascertaining the deposits against which reserves shall be determined. Balances in reserve banks due to member banks shall, to the extent herein provided, be counted as reserves.

National banks located in Alaska or outside the continental United States may remain nonmember banks, and shall in that event maintain reserves and comply with all the conditions now provided by law regulating them; or said banks, except in the Philippine Islands, may, with the consent of the Reserve Board, become member banks of any one of the reserve districts, and shall, in that event, take stock, maintain reserves, and be subject to all the other provisions of this Act.

SEC. 20. So much of sections two and three of the Act of June twentieth, eighteen hundred and seventy-four, entitled "An Act fixing the amount of United States notes, providing for a redistribution of the national-bank currency, and for other purposes," as provides that the fund deposited by any national banking association with the Treasurer of the United States for the redemption of its notes shall be counted as a part of its lawful reserve as provided in the Act aforesaid, is hereby repealed. And from and after the passage of this Act such fund of five per centum shall in no case be counted by any national banking association as a part of its lawful reserve.

BANK EXAMINATIONS

SEC. 21. Section fifty-two hundred and forty, United States Revised Statutes, is amended to read as follows:

The Comptroller of the Currency, with the approval of the Secretary of the Treasury, shall appoint examiners who shall ex-

amine every member bank at least twice in each calendar year and oftener if considered necessary: *Provided, however,* That the Federal Reserve Board may authorize examination by the State authorities to be accepted in the case of State banks and trust companies and may at any time direct the holding of a special examination of State banks or trust companies that are stockholders in any Federal reserve bank. The examiner making the examination of any national bank, or of any other member bank, shall have power to make a thorough examination of all the affairs of the bank and in doing so he shall have power to administer oaths and to examine any of the officers and agents thereof under oath and shall make a full and detailed report of the condition of said bank to the Comptroller of the Currency.

The Federal Reserve Board, upon the recommendation of the Comptroller of the Currency, shall fix the salaries of all bank examiners and make report thereof to Congress. The expense of the examinations herein provided for shall be assessed by the Comptroller of the Currency upon the banks examined in proportion to assets or resources held by the banks upon the dates of examination of the various banks.

In addition to the examinations made and conducted by the Comptroller of the Currency, every Federal reserve bank may, with the approval of the Federal reserve agent or the Federal Reserve Board, provide for special examination of member banks within its district. The expense of such examinations shall be borne by the bank examined. Such examinations shall be so conducted as to inform the Federal reserve bank of the condition of its member banks and of the lines of credit which are being extended by them. Every Federal reserve bank shall at all times furnish to the Federal Reserve Board such information as may be demanded concerning the condition of any member bank within the district of the said Federal reserve bank.

No bank shall be subject to any visitatorial powers other than such as are authorized by law, or vested in the courts of justice or such as shall be or shall have been exercised or directed by Congress, or by either House thereof or by any committee of Congress or of either House duly authorized.

The Federal Reserve Board shall, at least once each year, order an examination of each Federal reserve bank, and upon joint application of ten member banks the Federal Reserve Board shall order a special examination and report of the condition of any Federal reserve bank.

SEC. 22. No member bank or any officer, director, or employee thereof shall hereafter make any loan or grant any gratuity to any bank examiner. Any bank officer, director, or employee violating this provision shall be deemed guilty of a misdemeanor and shall be imprisoned not exceeding one year or fined not more than \$5,000, or both; and may be fined a further sum equal to the money so loaned or gratuity given. Any examiner accepting a loan or gratuity from any bank examined by him or from an officer, director, or employee thereof shall be deemed guilty of a misdemeanor and shall be imprisoned not exceeding one year or fined not more than \$5,000, or

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both; and may be fined a further sum equal to the money so loaned or gratuity given; and shall forever thereafter be disqualified from holding office as a national-bank examiner. No national-bank examiner shall perform any other service for compensation while holding such office for any bank or officer, director, or employee thereof.

Other than the usual salary or director's fee paid to any officer, director, or employee of a member bank and other than a reasonable fee paid by said bank to such officer, director, or employee for services rendered to such bank, no officer, director, employee, or attorney of a member bank shall be a beneficiary of or receive, directly or indirectly, any fee, commission, gift, or other consideration for or in connection with any transaction or business of the bank. No examiner, public or private, shall disclose the names of borrowers or the collateral for loans of a member bank to other than the proper officers of such bank without first having obtained the express permission in writing from the Comptroller of the Currency, or from the board of directors of such bank, except when ordered to do so by a court of competent jurisdiction, or by direction of the Congress of the United States, or of either House thereof, or any committee of Congress or of either House duly authorized. Any person violating any provision of this section shall be punished by a fine of not exceeding \$5,000 or by imprisonment not exceeding one year, or both.

Except as provided in existing laws, this provision shall not take effect until sixty days after the passage of this Act.

SEC. 23. The stockholders of every national banking association shall be held individually responsible for all contracts, debts, and engagements of such association, each to the amount of his stock therein, at the par value thereof in addition to the amount invested in such stock. The stockholders in any national banking association who shall have transferred their shares or registered the transfer thereof within sixty days next before the date of the failure of such association to meet its obligations, or with knowledge of such impending failure, shall be liable to the same extent as if they had made no such transfer, to the extent that the subsequent transferee fails to meet such liability; but this provision shall not be construed to affect in any way any recourse which such shareholders might otherwise have against those in whose names such shares are registered at the time of such failure.

LOANS ON FARM LANDS

SEC. 24. Any national banking association not situated in a central reserve city may make loans secured by improved and unencumbered farm land, situated within its Federal reserve district, but no such loan shall be made for a longer time than five years, nor for an amount exceeding fifty per centum of the actual value of the property offered as security. Any such bank may make such loans in an aggregate sum equal to twenty-five per centum of its capital and surplus or to one-third of its time deposits and such banks may continue hereafter as heretofore to receive time deposits and to pay interest on the same.

The Federal Reserve Board shall have power from time to time to add to the list of cities in which national banks shall not be permitted to make loans secured upon real estate in the manner described in this section.

FOREIGN BRANCHES

SEC. 25. Any national banking association possessing a capital and surplus of \$1,000,000 or more may file application with the Federal Reserve Board, upon such conditions and under such regulations as may be prescribed by the said board, for the purpose of securing authority to establish branches in foreign countries or dependencies of the United States for the furtherance of the foreign commerce of the United States, and to act, if required to do so, as fiscal agents of the United States. Such application shall specify, in addition to the name and capital of the banking association filing it, the place or places where the banking operations proposed are to be carried on, and the amount of capital set aside for the conduct of its foreign business. The Federal Reserve Board shall have power to approve or to reject such application if, in its judgment, the amount of capital proposed to be set aside for the conduct of foreign business is inadequate, or if for other reasons the granting of such application is deemed inexpedient.

Every national banking association which shall receive authority to establish foreign branches shall be required at all times to furnish information concerning the condition of such branches to the Comptroller of the Currency upon demand, and the Federal Reserve Board may order special examinations of the said foreign branches at such time or times as it may deem best. Every such national banking association shall conduct the accounts of each foreign branch independently of the accounts of other foreign branches established by it and of its home office, and shall at the end of each fiscal period transfer to its general ledger the profit or loss accruing at each branch as a separate item.

SEC. 26. All provisions of law inconsistent with or superseded by any of the provisions of this Act are to that extent and to that extent only hereby repealed: *Provided*, Nothing in this Act contained shall be construed to repeal the parity provision or provisions contained in an Act approved March fourteenth, nineteen hundred, entitled "An Act to define and fix the standard of value, to maintain the parity of all forms of money issued or coined by the United States, to refund the public debt, and for other purposes," and the Secretary of the Treasury may for the purpose of maintaining such parity and to strengthen the gold reserve, borrow gold on the security of United States bonds authorized by section two of the Act last referred to or for one-year gold notes bearing interest at a rate of not to exceed three per centum per annum, or sell the same if necessary to obtain gold. When the funds of the Treasury on hand justify, he may purchase and retire such outstanding bonds and notes.

SEC. 27. The provisions of the Act of May thirtieth, nineteen hundred and eight, authorizing national currency associations, the

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issue of additional national-bank circulation, and creating a National Monetary Commission, which expires by limitation under the terms of such Act on the thirtieth day of June, nineteen hundred and fourteen, are hereby extended to June thirtieth, nineteen hundred and fifteen, and sections fifty-one hundred and fifty-three, fifty-one hundred and seventy-two, fifty-one hundred and ninety-one, and fifty-two hundred and fourteen of the Revised Statutes of the United States, which were amended by the Act of May thirtieth, nineteen hundred and eight, are hereby reenacted to read as such sections read prior to May thirtieth, nineteen hundred and eight, subject to such amendments or modifications as are prescribed in this Act: *Provided, however,* That section nine of the Act first referred to in this section is hereby amended so as to change the tax rates fixed in said Act by making the portion applicable thereto read as follows:

National banking associations having circulating notes secured otherwise than by bonds of the United States, shall pay for the first three months a tax at the rate of three per centum per annum upon the average amount of such of their notes in circulation as are based upon the deposit of such securities, and afterwards an additional tax rate of one-half of one per centum per annum for each month until a tax of six per centum per annum is reached, and thereafter such tax of six per centum per annum upon the average amount of such notes.

SEC. 28. Section fifty-one hundred and forty-three of the Revised Statutes is hereby amended and reenacted to read as follows: Any association formed under this title may, by the vote of shareholders owning two-thirds of its capital stock, reduce its capital to any sum not below the amount required by this title to authorize the formation of associations; but no such reduction shall be allowable which will reduce the capital of the association below the amount required for its outstanding circulation, nor shall any reduction be made until the amount of the proposed reduction has been reported to the Comptroller of the Currency and such reduction has been approved by the said Comptroller of the Currency and by the Federal Reserve Board, or by the organization committee pending the organization of the Federal Reserve Board.

SEC. 29. If any clause, sentence, paragraph, or part of this Act shall for any reason be adjudged by any court of competent jurisdiction to be invalid, such judgment shall not affect, impair, or invalidate the remainder of this Act, but shall be confined in its operation to the clause, sentence, paragraph, or part thereof directly involved in the controversy in which such judgment shall have been rendered.

SEC. 30. The right to amend, alter, or repeal this Act is hereby expressly reserved.

Approved, December 23, 1913.

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